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NATURE NOTES,

THE SELBORNE SOCIETY'S MAGAZINE

EDITED BY

JAMES BRITTEN, F.L.S.,

OF THE BRITISH MUSEUM.

HE PRAYETH BEST WHO LOVETH BEST
ALL THINGS BOTH GREAT AND SMALL:
FOR THE DEAR GOD WHO LOVETH US,
HE MADE AND LOVETH ALL.

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Nature Notes:

The Selborne Society's Magazine.

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A TRIO OF VOCALISTS.

IT is not often possible to study the habits of such birds as nightingales, blackcaps, and whitethroats, when perfectly at ease and therefore free to show their natural characteristics. As it happens, I am able to do this, since I possess a perfectly tame specimen of each of these birds. It is one of my favourite amusements to let them all three out of their cages, and whilst I am quietly writing I watch their behaviour towards each other. Lest I should be blamed for keeping such birds in captivity I must explain how they came into my possession.

The whitethroat is my beloved "Fairy," who appealed to me five years ago as a featherless orphan outside the window, and, happy as a bird can be, she certainly would think it the height of cruelty to be turned adrift into the woods. I have learned by several rather sad experiences that to let any creature which has been long in captivity suddenly have its liberty out of doors, and so force it to find its own food, is at best a doubtful kindness, and generally leads to a miserable end.

Wild birds and animals have a rare instinct for finding out an interloper, and they spend their best energies in pursuing the intruder until they have persecuted it to death. One winter I was delighted to see a ring-ousel on the lawn and hoped it would stay, but alas! the blackbirds gave it no peace; they flew at it continually and drove it from place to place till it was compelled to seek shelter outside my domains.

Besides this bird-boycotting, there is the food difficulty. A bird that has been used to have all its wants supplied and has lived an entirely artificial life is much to be pitied when set free, for, having probably lost the appetite for its natural food, and being unable to find that to which it has become accustomed,

starvation lies before it, even though the means of living may be within its reach. This I proved in the case of my pet starling, Richard the Second. I had fondly hoped that on the dewy lawns in early morning he would find worms and grubs sufficient to satisfy his hunger during the time he was lost in the garden. When, however, I did light upon him, after his two days' absence, he was in a miserably starved condition, and was only nursed back to health with constant care and attention.

My blackcap was given to me by a lady who was no longer able to keep him. It was, when I received the bird, too late in the year to attempt to let him have his liberty, so it seemed best at any rate to keep him caged through the winter. Possibly next spring, when blackcaps are arriving from abroad, it may be fitting to let him have the option of choosing a mate for himself. I shall be truly sorry to part with such a delightful inmate, but at the same time I feel that it would not be kind to retain him against his will. At present he is my daily companion, often out of his cage and sitting on my writing table, absolutely without fear. He is a calm, thoughtful bird, with ideas of his own, which I often notice that he carries out in a very methodical fashion.

As to the nightingale, I had many scruples about accepting it, for it seems to me a cruel thing to dream of caging such a bird. I cannot learn anything about the early history of this individual nightingale, but from its extreme tameness I imagine it must have been brought up as a fledgling from the nest. I am told that it was prize-winner at last summer's Crystal Palace bird show. The lady who possessed it was suddenly called to India and gave the bird to a friend in town, whose cook took kind care of the sweet singer. From London the bird was sent to me at the beginning of winter, when to let it loose would have been certain death. I therefore keep it until next spring, when I hope it may be possible to let it go into the woods.

Thus it has come to pass that the shy English nightingale, so seldom seen except perhaps in early summer, when we may chance to catch a glimpse of the plain brown bird which is filling the air with sweet music, perched on a spray in some woody copse, is now my intimate friend, living with me hour by hour, calmly happy and content and taking mealworms from my hand as readily as does my long-domesticated whitethroat "Fairy." She is my third vocalist, who sings almost throughout the year. She is now sitting on my shoulder whilst I am writing, and is crooning her exquisite little ditty into my ear as though to remind me that she, too, must not be forgotten. Never was there a sweeter bird or one more full of character. The tiny elf takes a keen interest in everything I do; nothing escapes her keen eyes. I cannot turn my head but she must make a special chirp to call my attention and make me notice her. Brisk and alert, she seems to have nervous energy enough for half-a-dozen birds. Then how amusing are her little fits of

temper! She perfectly delights in maintaining a sham fight with an aggressive finger, setting up her crest, scolding and pecking with right good will, and yet she is quieted in a moment by a gentle word of affection.

As soon as these three birds are let out, their first idea is to go into each other's cages, and see what delectable things are to be found there. This strikes me as very human. We are all apt to think some other lot would be better than our own, and, like my birds, a little investigation proves to us that things are, after all, very equally distributed. The blackcap and nightingale will sometimes exchange cages for a whole day, but I observe that they generally seem glad to return to their own homes again.

It would have been delightful to have kept the three birds in one cage, and I hoped they would have become friends in time and agreed to live together; but no, there is a deadly feud between the blackcap and the nightingale, while Fairy is afraid of both of them. I am curious to know when these two vocalists will begin to sing. At present (December) the blackcap only chirps, and the nightingale makes a loud noise exactly like a green tree-frog, a croak of the harshest description, only varied by an occasional clicking note. The bird is most deliberate in its ways, standing quietly thinking for three or four minutes, and then rapidly carrying out its idea either in a flight round the room or making a sudden assault upon the blackcap. At other times it will take a tour of inspection, carefully examining every article in the room on all sides, as if it intended making an inventory of the furniture. When showing the bird to strangers I place the cage on the floor, throwing a mealworm a little distance off. Out through the open door comes the nightingale, and after a momentary pause to gaze at his audience, calmly goes in search of the dainty he so dearly loves, picks it up and returns to discuss it in the privacy of his cage. This little evolution the bird will repeat several times with much the effect of a small jack-in-the-box.

The blackcap is still more sedate, and, once perched on a chair-rail in a quiet corner, will remain for half an hour without moving. The one thing that rouses the ire of both these birds is the arrival of a fourth personage in the shape of my tame robin. On seeing him, I am sorry to say that language of the most abusive description is launched at him, and he warbles back notes of defiance, which though very melodious to my ears, probably may embody sentiments that ought not by any means to be printed in these pages. The nightingale is extremely like a robin, *minus* its red breast. It is much the same tint of rich brown on the back and head, becoming a lighter shade beneath the wings. When on the move the bird has a nervous trick of shaking its tail and body up and down somewhat after the fashion of a wagtail, and my specimen, although so tame, is yet shy, and much prefers to be in a darkened cage to remaining in the light. I could not quite believe this until I found that he

invariably chose to return to his own residence (built, I imagine, specially for nightingales), with its canvas top and thick wooden bars, rather than adopt the far handsomer one I had provided for him.

I should like to give a word of counsel to bird keepers as to affording shade to their caged pets. Any of our English warblers, accustomed as they are to the subdued light under the leafy boughs of trees, must suffer great distress when placed in the glare of sunlight hour after hour. Canaries may not mind it so much, as they are artificially reared and more used to our home life, but I think that even they would welcome a covering over part of the cage to afford their eyes a little respite from the bright light in which they are often placed, when hanging near a window. If my three birds remain in health until next spring, I expect to be regaled with some delightful music for a little while until I can see my way to let them at liberty. This must be prepared for by hanging the birds' cages outside the house for a week or more, possibly under the branches of a tree, until the birds have learnt the sights and sounds of out-of-door life, have in a measure learnt also the general look of the garden, so that they will not be scared when they first perch amongst the branches, and when hungry they will know where to come for food and water. If, after an excursion hither and thither they do return to roost in their old homes it will prove very pleasantly that they are happy there, and one can then retain them with an easy mind.

ELIZA BRIGHTWEN.

ACORNS.

AMONG the numerous and varied forms taken by the fruit and seed vessels of trees and plants in general, few are more beautiful, and at the same time simpler, than that of the oak.* This indeed is so universally recognized that acorns have for ages been utilized for all kinds of decorative purposes.

Broadly speaking, the outline might be described as oval, but it varies so much that in many cases the term would not be strictly applicable. Like the apple, Spanish chestnut, and many other trees, each individual oak produces fruit of a certain fixed shape, which year by year is strictly adhered to. On one tree we find the acorns all of the typical egg shape, with only occasional trifling modifications; on another they are comparatively short and wide, with a broad base, and a decided pit or depression surrounding the apex; while the produce of a

* The common British oak (*Quercus pedunculata*) is the species referred to.

third tree will perhaps be of a narrow conical form, with no terminal pit whatever. Then, again, there are oaks whose fruit inclines to a cylindrical conformation. We often find specimens, too, whose contour is not quite symmetrical, the central axis being more or less curved—the effect probably of overcrowding. A perfect acorn in its cup is, indeed, a beautiful object; the contrast of its smooth glossy skin with the rough, granulated texture of the protecting cup has a particularly pleasing effect.

The cup too, apart from the acorn, is a very pretty object, though like many other beautiful but common natural productions it attracts but little attention. There are probably many persons who have hardly ever noticed either acorn or cup since the time when they put away childish things. Yet even to them the sight of an acorn cup must sometimes serve to recall those happy, half-forgotten days of the dim past, when real pleasure and enjoyment were procured from the simplest sources, and the various natural objects found ready to hand supplied ample material for absorbing games and pastimes. Acorn cups served as make-believe tea cups, or baskets; or perhaps represented birds' nests, with a few seeds of some sort put in for eggs. Deft fingers too, would, by making spout and handle of tiny twigs, transform an acorn into a very tolerable teapot.

The cups vary a good deal in form, some being shallow and saucer-like, while others are deeply cup-shaped. Those having the edge slightly turned inwards are very suggestive of a bird's nest—that of a chaffinch or goldfinch for instance. At an early stage of growth the cup closes in so much as almost to hide the acorn. The compressed scales which give to the outside its rough appearance are arranged in oblique parallel rows following the curve of the cup. They are large and somewhat irregular at the base, where the substance of the cup is thickest; and diminish in size more or less gradually as they approach the thin rim or margin. Their shape bears some slight resemblance to that of a split chestnut.

But beautiful as is the form of the acorn, its colouring is not a whit less attractive, indeed the main purport of these lines is to draw attention to the regular cycle of harmonious tints and combinations of tints through which it passes during the process of ripening.

On attaining its full growth the acorn is all over of a full, rich and very lovely green, inclining to olive, with the exception of the small portion covered by the cup, and the little point at the apex. The disc in contact with the bottom of the cup is at first an opaque yellow-grey, and is surrounded by a space of pale delicate Naples yellow, showing at first a tinge of primrose. It is lighter in colour than the rest of the surface, and the combination of the two tints is singularly pleasing and harmonious. The small projecting point is a neutral grey, but it often acquires a reddish look by contrast with the surrounding green. An

accidental split in the glossy green rind, by exposing the pinkish grey beneath it, produces an exquisite effect. The surface of the acorn, especially towards the apex, is often covered with a soft grey bloom, like that of a ripe plum.

As the season draws on, the colouring becomes gradually warmer and richer. The zone of pale yellow surrounding the base is now suffused with a pinkish blush, producing a delicate salmon or rosy fawn tint, which soon begins to extend itself farther, passing almost insensibly into the green. When acorn and cup first part company, this paler coloured space, resulting from the shelter afforded by the latter, has a fairly distinct and well-defined edge; but this soon becomes lost by the blending and intermingling of the two colours. A similar light tint sometimes makes its appearance at the opposite end, or elsewhere, in irregular patches. As the acorn ripens, an indistinct sort of grain, like that of some kinds of wood, becomes gradually more and more perceptible, underlying the surface, as it were: besides which, there are sometimes more decided longitudinal streaks of a darker shade than the rest of the surface, disposed at pretty regular distances from each other, reminding one of the markings of certain varieties of pumpkins grown by cottagers. They are dark green at first, but afterwards change to purplish grey or brown.

The prevailing green, as ripening proceeds, gradually takes a yellow or orange tone, the darker streaks differing much as to strength and intensity, and great variety is now shown both as to colour and markings. Rich yellowish browns are blended and contrasted with olive tints, so as to produce most harmonious effects. Sometimes the sumptuous golden hues of the maple leaves at this season are approached, or the warm colouring of a well ripened apple. As autumn wears on, and the weather begins to show signs of approaching winter, the acorn grows gradually darker, still, however, preserving its warm glowing colour and glossy surface; and, after passing through a series of fine olive or orange browns, becomes at last a deep chocolate or liver colour, retaining in some cases indistinct stains of the darkest sap green. It is now fully ripe, and soon begins to lose its beautiful polish, fading at last into a dead opaque brown inclining to red or grey, like the fallen leaves under which it lies hidden.

It seems sad that such an infinitesimal proportion of the annual crop has any chance of germinating and entering upon that glorious future possible to each individual acorn, provided it be placed under conditions favourable to development. Only a favoured few are planted, either by the hand of man, or through some accident; as when an acorn gets trodden into suitable soil by the hoofs of cattle, or is buried by rooks, field-mice, &c. Then indeed it will strike its long tap root down into the earth, and rearing its stem aloft, gradually overtop and leave behind the tangled growth of brambles and thorns which have

perhaps well-nigh choked and smothered it, but at the same time protected it from greater dangers. If fortunate enough to escape the hedger's axe or hook, the young sapling goes on forcing its shapely top up into the light and air, and year by year increasing in bulk, develops in time into a noble oak.

Very slowly and imperceptibly the trunk swells and loses the rounded form of youth, and the bark becomes more rugged and deeply cleft. The big lateral roots go off gradually from the bole in gentle curves, forming strong buttresses, whose tops sink into and are finally lost in the rounded part of the trunk above.*

Gradually the mighty arms spread abroad, in long sweeping curves, and abrupt unlooked-for twists and turns. Year after year, it may be century after century, while many generations of men are born, fulfil their allotted span, and pass away, the tree goes on producing its crop of acorns, keeping in all probability to its own peculiar mould or pattern to the very last.

Every "acorn year" great numbers are crushed and trodden to pieces, and in process of time fulfil what is perhaps their humble part in the great scheme of Nature, by rotting and enriching the soil; for though so few are destined to become trees, not one is wasted. An overwhelming majority indeed serve as food for various animals; pigs, sheep, goats, &c., devour large quantities, as well as rats, squirrels and field-mice. Among birds, too, there are many acorns eaters, as ducks, pheasants, rooks, jays, wood-pigeons and others—indeed acorns form an important item in the winter fare of the last-mentioned bird. During long-continued frosts, and when the ground is deeply covered with snow, large flocks of wood-pigeons resort to sheltered ditches and hollows in woods, where they search among the fallen leaves for acorns. Rooks do not wait for the coveted fruit to fall, they pluck it from the trees almost before it is ripe. A company of these knowing birds taking their annual toll from the oaks is a pleasing and familiar autumn sight. They wheel and hover over the trees, keeping a sharp look-out for hidden dangers, and every now and then dashing down, one or two at a time, and snatching the acorns from the boughs.

G. T. Rope.

* The spreading bole and large tap root running down deep into the earth give to a full grown oak that immense power of resistance to the force of the wind which is so characteristic of this tree. The great weight concentrated at the base of the trunk tends to counteract that of the spreading top, thus supplementing the holding power of what might be called the lower limbs. Oaks growing in the open, on fairly level ground, being able to project their roots so as to offer resistance to gales from all points of the compass, are seldom blown down. Roadside trees, however, on steep banks, whose power of throwing out these strong buttress-like supports is limited to one direction, do occasionally succumb to the violence of winds blowing from such a quarter as to take advantage of their weak points.

SLAPTON LEY.

HAVING resided for a year almost on the shores of this famous water, I am enabled to write an account of it which I hope will interest some of the readers of NATURE NOTES.

It is situated in South Devon, in that part of Start Bay where the coast faces eastwards, and is the largest lake in the county; its length is about two miles, its greatest width some 800 yards, and the area 237 acres. Separated from the sea merely by a bank of pebbles and sand, along which runs the Dartmouth and Kingsbridge coach road, the water of the Ley is a trifle brackish, and when the water in it is low, as has been very much the case this year, and the sea tides are high, there is an extra soakage through of salt water, which is detrimental to the fish and makes them sulky about taking the bait—at least so say the fishermen.

The bank was formed, and with it the Ley, I conjecture, in the year 1099, A.D., when there was a general upheaval of the South Devon coast of some 30 feet, as recorded in the *Saxon Chronicles* and evidenced by raised beaches, one of which was exposed to view under Plymouth Hoe not many years ago when some excavations were being made there under my direction. The supply of fresh water to the Ley is given chiefly by a considerable stream entering the upper or northern end, and by a second of lesser size coming in at about the middle of the lake. Both of these streams abound with good-sized trout, though there are none in the Ley itself, for they would soon be devoured by the pike who greatly relish them. When there is an excess of water in the lake it is got rid of by an underground conduit at the lower end, but at ordinary times there is no passage to the sea.

The water is divided into two unequal parts by a roadway and bridge, and the upper and smaller half is, during the greater part of the fishing season, covered with reeds growing some 12 or 15 feet out of the water, and forming a dense jungle of cover for wild fowl and fish; this cover also exists to a considerable extent in the lower lake. I was able this year, owing to the lowness of the water, to penetrate these reeds, and realize what a splendid cover they afforded, but one could not get in very far, the ground soon becoming moist. These reeds are cut each winter and sold by auction, fetching it is said £200, and are used principally for thatching and in partition walls instead of wooden laths.

I suppose there is no place in England where so many pike and perch are caught as here, and besides these there are many roach, and eels, and other fish.

Being a trout fisherman, I never took very kindly to the Ley fishing, however, I did go out several afternoons during the season, which lasts from April to October, in a boat. There is no need for one to know anything about fishing, one is sure to catch fish. The four boatmen, Eli, John, Coley and Robert,

have each been at the work for forty years or so, and know all about it; one of them goes with you in the boat, and if they are all engaged, then the coachman from the Sands Hotel—they all belong there—will go. It is astonishing how many fish you get. My son and I together have in four hours taken 200 perch and three or four pike, and this is quite an ordinary catch. Sometimes one does not "run" any pike, but one is sure to get perch at all times—I never took less than three dozen in an afternoon. When I have told new comers of these figures they have seemed quite amazed, and said, "How did you do it?" I have answered, "Go and try, you'll find out soon enough." It is no uncommon thing to get ten or more pike in a day, but all under three pounds are returned to the water.

Some people do not care to eat pike, and I have read somewhere that at Slapton they are thought so worthless, that after being landed they are buried; this, however, was not confirmed by the fishermen. I think myself, a pike nicely stuffed, baked, and served with brown gravy is not to be despised, and a *réchauffé* next day with melted butter and mashed potatoes is good. Still, I should not care to eat pike every day. For bait, roach is used as a rule, but it is a mistake to suppose that (as stated in some books) pike do not feed on perch because of the bristles in the back fin, for the Slapton boatmen have assured me that when they have opened pike they have always found them to contain more perch than roach, the reason being that the former are much more abundant than the latter. I have found it best to fry perch with the scales on, and it saves a deal of trouble not to skin eels, but simply cut them into lengths of three inches before putting them in the pan.

Slapton has its sea-fishing too, and I have seen as many as 35,000 mackerel taken at one haul; it is quite a sight to watch the fisherfolk as they are on the look-out for fish, then the launching of the boat, casting the net around the "school" of fish, and finally the drawing in the net and landing the "take" in "maunds"—women joining the men in these operations. Then comes the bargaining with the cart-men, who are in waiting, after which the public can buy and carry off what they want, to be cooked quite fresh. The sea-fish most usually caught are plaice and dabs, mackerel only appear at intervals, and there are taken besides, dory, red mullet, small cod, gurnet, soles, merry-soles, crabs and lobsters, and others no doubt; but I record what I have seen.

Slapton Ley is a great place for sport with the gun; when there is a big shoot, besides the duck and widgeon that are bagged, large numbers of coot are killed, and these last are given to the villagers, who say they are good eating; but I have never tried them. Inland game abounds, with wood-pigeons and rabbits in large numbers. This locality is renowned for the number of the different species of its birds, and perhaps the most wonderful sight of the place is the great flocks of starlings that

are constantly to be seen; one hears them before seeing them as they whizz through the air, and when they settle, the trees or ground become black with them. The last time I was fishing, I saw about two acres of ploughed land thickly covered with them. On another recent occasion, when on the Ley, it was a pretty sight to see a covey of young partridges led by their parents to the water's edge to drink. Owls are numerous, and often at night have I listened to the sharp "kee-wick," "kee-wick," of the screech-owl. Of less common birds I may mention the bittern, two good specimens of which the landlord of the Sands Hotel has in his billiard-room; he also showed me an osprey, which, however, I think he said he shot at Torquay. I was not fortunate enough to see one of those interesting birds myself, but the boatmen told me that they sometimes visit the Ley.

At certain seasons the plants that grow under the water are an impediment to fishing operations, and this exceptional year, at one time, it was quite difficult to propel the boats to the fishing grounds. I have noticed webs joining the beautiful fronds of these sub-aqueous plants, but the boatmen could not tell me what spider it is that spins them. From the shingle bank separating Slapton Ley from the sea came, says Mr. Page in his *Coasts of Devon*, the first seakale eaten in England.

It remains to be said that there is a good hotel at Slapton Sands, where permission to fish in the Ley is obtained. In the summer there are numerous visitors to the village of Slapton, which is about three-quarters of a mile inland, and completely hidden from the coach road. The scenery, as one drives by coach along the coast from Dartmouth, is extremely beautiful, reminding the traveller of the Corniche road between Mentone and Monte Carlo, and it may be fairly said that naturalists in search of a holiday resort might do worse than spend a few days at Slapton. Those wishing to study minutely the natural history of this district in all its bearings, may well turn to the pages of Bellamy's *Natural History of South Devon*, which, though published so far back as 1839, is yet full of interest. Copies of the work are to be found at the Plymouth libraries, or can be obtained of the local second-hand booksellers for three or four shillings.

GILES A. DAUBENY.

Birds' Nests.—It seems to me that birds, when not disturbed at nesting-time, resort to the same localities for their second families. This summer a pair of thrushes built in ivy encircling a large oak tree about six feet from the ground, and although I used to sit in a chair about three feet off, they got quite used to my presence, and did not mind feeding their young before me. If I had stood up I could with a stick easily have hit them. As soon as the brood was fledged and able to shift for themselves, the same pair of thrushes (I believe, built in a lilac tree about four yards off their old situation, under which I walked constantly, and they again did not mind me in the least. In the same manner a pair of greenfinches built two nests one after the other in trees a few yards apart, as soon as the first family was able to be left to its own devices.

Cliff Cottage, Melbourne, Derby. ARTHUR MYERS.

THE ROYAL BUCK-HOUNDS.

A Deputation to Windsor.

Queen of the sixty years of constant grace
And love for all thy servants, great and small!
Suppliants we stand before thy Castle hall,
Dumb driven deer, and pity pleads our case;
Robbed of our antlers—proof of royal race—
Our limbs grown stiff within the prison stall,
From cruel barb-wounds still the blood-gouts fall,
Hounds' teeth upon our flanks have left their trace.

And we, who lent such honour to thy lawn
Who belled so cheerly thro' the Windsor glade,
We pray thee heal a hunted creature's smart!
Let the great year of gladness soon to dawn
Bring mercy to thy gentle subjects' aid,
And England find a manlier merrier heart!

H. D. Rawnsley.

CAST FEATHERS ON CHINESE WALLS.

THE statement of the lady signing herself Edith A. Stock, published in the November number of Nature Notes, can scarcely be taken seriously by any one who has considered the miserable question of the means by which the markets are supplied, nay, deluged, with feathers, wings, and carcases, obtained by the wholesale massacre of the fairest birds in creation; not egrets only, but birds of paradise, humming birds, and recently the crowned Victoria pigeon, whose name might well have won for the bearer a perennial close season all over the world. But the suggestion of your correspondent, if left unnoticed, may help to quench the scruples which are evidently stirring the hearts of some ladies respecting the destruction of bird-life, which they incite for the sake of obtaining an addition to their head-gear.

Shopkeepers as a class can hardly be expected to communicate to their customers unwelcome information which might prevent the sale of a profitable article. The plumes they sell are likely to be real or artificial, plucked from the dead or living bird (if the latter procedure should be held to improve the quality), just as the buyers prefer to believe. The serene credulity of many persons has, however, been disturbed by the wide circulation given by the London and country press to the statements made by Sir William Flower and other eminent ornithologists—that the so-called artificial aigrettes, submitted

to their inspection, have been invariably composed of real feathers, or the remains of such—ugly, split-up, often dyed and stiffened, but still the remains of the feathers of egrets or herons, the exact species of which could frequently be recognized by an expert.

Now, another salve for tender consciences is offered by the suggestion that the feathers "sold by thousands, and possibly millions," in the London shops, are "cast by the birds themselves after the breeding season." Mrs. (or Miss) Stock bases her opinion on the fact of having received a quantity of egret plumes in very good condition gathered "on the walls in China" by a lady missionary, who could have sent her friend as many as ever she wished for. It would be interesting to know when these feathers were gathered, and whether they have been examined by any experienced person. It seems strange that a lady with such a purse of Fortunatus open before her should have failed to wish for a large supply of a valuable article to be obtained in so easy and unobjectionable a manner. She writes of having worn egret feathers for some years, and therefore cannot understand the pain which the sight of these lovely plumes inflicts on those men and women who are vainly protesting against the cruel fashion which has caused, and is causing, the slaughter of birds to an extent far beyond human reckoning.

This may be deemed an extreme view of the matter. Let those who think so inquire into it for themselves. As a contribution to the inquiry, here are the opinions of two recognized authorities on the latest excuse for aigrette wearing.

Professor Newton writes:—"I should have thought the statement to which your letter refers hardly worth notice. Whatever number of egrets' feathers the lady missionary in China may have picked up, it is certain that 'cast' feathers do not find their way into the market, which is undeniably supplied with them from birds which have been killed during the breeding season. I should doubt whether cast feathers have any value at all in the plume trade, and my belief is that no one concerned in it would look at them. Perhaps the correspondent might be invited to submit the feathers of which she writes to the Editor for inspection and report."

Mr. W. H. Hudson writes:—"I have no hesitation in saying that the statements to which you call my attention cannot be true. The tuft of elongated dorsal feathers which the egret displays in spring is, we know, a nuptial ornament, present in both sexes, and is shed at the end of, or shortly after, the breeding season. I have had opportunities of seeing these feathers in all stages on the bird, and have also picked up a few that had been dropped in swamps where egrets were abundant, and I can confidently say that during and after incubation they deteriorate; and that after the young have left the nests, and

when the feathers are ready to drop out, they are no longer the beautiful objects that they were—the slender recurved plumes, white as driven snow, with all their hair-like filaments intact. These old feathers are dull or dirty white in colour, out of curl at the tips, and with many of the filaments broken.

"The story that these nuptial feathers are shed in some places in such amazing quantities that it would be false economy to shoot the birds to obtain them; and that probably thousands, nay, millions, of such cast feathers are supplied to the London shops, is preposterous. The birds are not excessively abundant; they subsist on fish, crabs, and such creatures, and can live only in swamps. Each bird produces only a small number of these valued feathers, and when he sheds them he does not shed them all together in some spot where a feather-hunter will be sure to find them. He drops them one by one at odd times, some falling in the water where he fishes, some among the trees and rushes where he roosts, and some are shed when he is on the wing going from place to place."

(Mrs.) E. PHILLIPS.

Vaughan House, Croydon,
December 23, 1896.

[We gladly insert the above important opinions on the statement published in our November number, and invite Mrs. (or Miss) Stock, whose address we did not keep, to communicate further with us on the subject, which, as we learn from other correspondents, is exciting much interest in Selbornian circles.—ED. *N.N.*]

BIRDS FROM MOIDART.*

MRS. BLACKBURN has been well known by name to ornithologists since, in 1872, she confirmed Dr. Jenner's observations on the callow young cuckoo's marvellous powers and habit of ejecting the other young birds which had the misfortune to be hatched in the nest with it. We are glad to have a sketch of the incident which came under this excellent observer's notice (which appeared originally in a slightly different form in *The Pipits*, and again in Gould's *Introduction to the Birds of Great Britain*) reproduced in the present volume. Another plate represents very faithfully a fledged young cuckoo and its foster parent, and a third an adult cuckoo. These will be useful to those who are studying our birds in the field, and trying to learn something about their changes of plumage. But we are anticipating. This sumptuous volume consists of a set of plates reproduced from Mrs. Blackburn's drawings; and notes about the subject of each plate, varying in length for the best of all possible reasons, namely, that the author had more worth telling to say about some birds than about others, and used no padding. A few of the plates represent scenery with characteristic birds prominently introduced, and scenes in bird-life. But the greater number of them are portraits of different species; in some cases together with their nests. We do not think they are all of equal merit, or that all of them have much merit.

* *Birds from Moidart and Elsewhere.* Drawn from Nature by Mrs. Hugh Blackburn (B). Small 4to, pp. viii., 191; 87 plates. Edinburgh: David Douglas, 1895.

Some are certainly not good portraits of the birds they purport to represent; but others are very good indeed. In the former the failing is usually in the outline of the bird, which is sometimes wooden and angular, in the drawing of the wing furthest from the observer, the nape of the neck (indifferent bird-stuffers generally stuff a bird's neck badly), and the thighs. These last should not be shown prominently (a golden plover has been furnished with thighs which would not disgrace a game Bantam cock), but here they mar what would otherwise be altogether delightful pictures, *e.g.*, those of the ringed-plover and common sandpiper. But we are very loth to find fault with any of the plates; because of their great beauty of execution, and the wonderful accuracy with which the attitudes and characteristic appearance of the birds have been depicted. This is what might have been expected, for, in the words of the author, "the pictures of birds in this book are all drawn from nature, most of them from life, and, when that was not feasible, from fresh killed specimens placed in the attitudes, and with the surroundings such as I had seen when they were alive."

The professed ornithologist will be grateful for the book, for the author has had exceptional advantages in observing birds to see which is not the lot of everyone, even though they may have sought birds far and wide. Among the more interesting plates we may especially call attention to that of the ospreys at their nest. But the fish (apparently of the salmon tribe), carried by the old birds to their young, look to us astonishingly heavy. That borne in the claws of the bird in the background is nearly as long as the bird itself, measured from its beak to the tip of its tail, and must have weighed a good deal. The ospreys hold the fish "fore and aft, with one foot before the other, in such a manner as would least impede their flight; the head of the fish foremost as they [the birds] flew against the wind." The subject of another plate is a pair of sea eagles at their nest, swooping at a couple of sheep dogs. And we may notice an ingenious tame starling raising a stone by inserting its beak under it, and then opening its bill wide, in order to see if any insects or worms are lurking beneath the stone; young herons in the nest; a red-necked phalarope floating duck-like on the water; downy black guillemots in the nest; and a skua attacking a gull. In this last the expression of sore sickness on the countenance of the unfortunate gull, forced to disgorge its fish, is admirably (perhaps humorously?) depicted. The letter-press includes some interesting notes on the habits of the osprey, and an account, in the words of a deer stalker, of three golden eagles hunting red deer, and killing a year-old stag. Here and there, too, we come upon facts which show that the author is a careful observer. We have culled the following as examples. Railway travelling has a bad effect on the health of birds. The eyes of an old cuckoo are pale, while those of a young bird are dark hazel. The rooks at Moidart have not so large a bare space at the base of the beak as have those which inhabit a rich agricultural country, perhaps, the author surmises, because they have not depth enough of soil to rub off the feathers. A ringdove in Kensington was observed eating the flowers of the horse-chestnut, and a captive woodcock, when groping for worms in a tumbler of wet mud, was seen stamping meanwhile with its foot on the floor of the cage, "as blackbirds do when they want worms to come up out of the earth, but with one foot at a time."

We notice a few inaccuracies in the book, which might have been avoided had the author consulted the modern histories of British birds. It is true that divers, of two species, breed in the north of Scotland, but the great northern diver is not one of them. Nor does the little auk breed in Shetland. The number of eggs laid by the oyster-catcher is usually three, not four, and the wood-wren is not so rare in Scotland as the author supposes. The illustrations of the spotted fly-catcher feeding a young bird, the song thrush (not an easy bird to draw truly), the chaffinch and the grey crows at a dead sheep on a cliff, especially take our fancy; also the beautifully drawn head of a wild swan, though the proportion of yellow and black on the bill should have been more carefully defined, since this is one of the marks of distinction between the whooper (to which the appended note refers) and Bewick's swan. But on the whole we like best the diving birds, and the coast scenes of bird-life, though the drawings of young birds in down and nest dress are very interesting.

All bird lovers will like to have this handsome volume, for it will always be a pleasure to look through the plates, and the author is quite justified in hoping

that this work may give to others some of the pleasure that Bewick's *British Birds* gave to her, and that it may lead them to "consider the fowls of the air as capable of affording delight in other ways besides filling a game-bag, or adorning a hat."

O. V. Aplin.

SHORT NOTICES OF BOOKS.

Life in Ponds and Streams, by W. Furneaux; 8vo, pp. xix., 406, 8 coloured plates, 311 cuts. Longmans, 12s. 6d. We are beginning to look on a new volume of Messrs. Longmans' "Out-of-Door Library" as a welcome accompaniment of the present-giving season; and we have little doubt that many youthful Selbornians have reason so to regard it. In natural history books, as in others, the rising generation nowadays is in some danger of being spoilt by the abundance of good things; one wonders whether they get more enjoyment from them than the nature-loving boys of forty years back used to derive from Wood's *Common Objects of the Country* and others of the same series, which then represented the highwater mark of cheap and good natural history books. Certainly they ought to do so, for in a volume like that now before us they have a perfect storehouse of information, popular and scientific, admirably illustrated, and clearly written by one who is well versed in his subject and knows how to communicate his knowledge.

An excellent introduction deals with the collector's work in ponds and streams, including minute forms of life, in connection with which is a useful disquisition on the microscope; then we come to "the pond-hunter's museum," and how to preserve the objects to be placed in it: then a chapter on aquaria and their management, with figures of the plants to be grown therein, which would be better if drawn to one scale, or if some indication of reduction were given—the frond of a duckweed, for example, appears to be almost as broad as the flower of the yellow water-lily, and, which is odd, the lesser water-plantain is at least twice as big as the greater! Then we begin with the lower forms of pond life, working our way up for the amœba and the hydra to leeches and molluscs, through crayfishes and freshwater shrimps, waterboatmen and dragonflies, caddises and water-beetles, till we arrive at fishes (a few), and wind up with the amphibious frogs, toads, and newts. This is a thoroughly good book, and the young folk who get it will find it permanently useful.

We hear a great deal nowadays about open spaces, but a century ago Londoners possessed a great many more of them than they do at present, although some were only "open" (in another sense of the word) to those who paid a fee for entering. Mr. Warwick Wroth has compiled a very interesting volume on *The London Pleasure Gardens of the Eighteenth Century*, which Messrs. Macmillan have produced in—if possible—a style more excellent than usual. The facsimile reproductions of old cuts and coloured plates, with portraits, maps, and the like—amounting in all to sixty-two in number—leave nothing to be desired, and add very greatly to the value of Mr. Wroth's extremely full and carefully-written accounts. An excellent plan shows the distribution of the gardens; it is remarkable how many of these clustered along what is now the singularly dreary south side of the river, from Bermondsey Spa—commemorated in Spa Road to Vauxhall, perhaps the most celebrated and the last to disappear; many will be surprised to learn that Vauxhall Gardens were not closed until the middle of 1859.

This book takes rank as a definite contribution to the history of London. It is as far removed as possible from the cheap compilations from well-known and easily accessible books which we too frequently meet with. Mr. Wroth has ransacked the British Museum and Guildhall Libraries, has searched newspapers and magazines, and has compressed into his 350 pages an amount of information which cannot fail to delight the topographer, the biographer, and the student of

manners. As a contribution to the history of the past—a subject which must interest all true Selbornians, as it did him who made Selborne famous—this monograph of London Pleasure Gardens is a book of permanent value, well worth the fifteen shillings which it costs.

"*A Sketch of the Natural History of Australia, with some Notes on Sport*, by Frederick G. Aflalo, F.R.G.S., F.Z.S., &c., illustrated by F. Seth; 8vo. (Macmillan, 1896, pp. xxviii. 307.) This is a popularly written, unpretentious and nicely got-up little book, illustrated by a frontispiece, map and numerous woodcuts. It consists mainly of a sketch of the most interesting animals belonging to the various groups of Vertebrate animals, each chapter being followed by a fuller list of species. The accounts given of the various animals differ much in length and value, being sometimes hardly more than a brief notice of name and locality, and at others including discussions on the origin, names and habits.

The author appears to have tried conscientiously to give the results of his own observations as far as possible, and this original matter lends more importance to the book than it would otherwise possess. In the section on fishes, there is a separate chapter on angling. The illustrations are numerous and characteristic, those of the birds, of which we are enabled to give a specimen, being particularly good. The Invertebrate are referred to an appendix, but much of this part of the book is too short and sketchy to be of any value. It would have been better either to have omitted the appendix altogether, or to have expanded it into a separate volume. The following passage, descriptive of the illustration, is a favourable specimen of the author's style :—

"The celebrated Laughing Jackass is about the size of our common crow, of a dull brown colour, with dashes of pale blue on the wing covers, and has an enormously powerful bill. Why 'Jackass' I know not, as its profile does not particularly resemble that of the patient donkey, nor can its voice be very aptly compared with either braying or laughing. Barton suggests that the word is of French origin, from a verb signifying to giggle. From its habit of starting its discordant pæan somewhere near sunrise, and, after keeping comparatively quiet all through the hotter hours, cackling a requiem to the day's decline, the bird has been called the 'settler's clock.' It may be remarked, however, that this by no means takes place with the methodical precision that romancers write of in their letters home. . . . The bird is commonly supposed to laugh at anyone in trouble; but I recollect on one occasion being abruptly deserted by my horse in presence of several of them without so much as an audible smile reaching me from the boughs overhead. My horse had been frightened by a small green snake lying in the roadway; but as I had to make up to the animal, which was the property of a friend, I was unable to watch, as I could have wished, whether the reputed snake-killers availed themselves of the opportunity. Like the native companion, forbearance has made a fearless bird of it; and it roosts freely in the various botanic gardens, or remains sedately perched on the telegraph wires along the railroads, undisturbed by the leisurely rattle of the passing 'express.'"

Several other volumes stand over for notice.

SELBORNIANA.

"Noble Sport."—Surely the verses entitled "Noble Sport" in NATURE NOTES for December are a good illustration of the exaggerated and misplaced sentimentality, which, as you say in "Falsehood of Extremes" in the same number, must tend to endanger the objects of the Selborne Society.

Rabbits in a warren are of course only allowed to exist at all because it is profitable to breed them as a food supply, for which purpose it is evident that they are useless until they are killed, and probably no means of killing them is more humane than the gun in skilful hands. To write pathetic verses over their fate is about as reasonable as to elevate the murder of the thousands of happy and innocent young geese and turkeys required for the Christmas market into a horrible tragedy. I allow that the feat of killing ten rabbits a minute for sixty consecutive minutes is more akin to the wonders accomplished by certain pork butchers in Chicago than to anything we should naturally call sport; but surely if a nobleman and his friend like to exhibit their skill as amateur butchers, we can hold them no more morally blameworthy than any other butchers who instead of rabbits slaughter sheep or pigs, though we may perhaps wonder at their taste.

G. E. W.

Barras Head.—Our readers may be interested to learn that Barras Head in Cornwall is now the property of the National Trust. This beautiful point forms one side of King Arthur's Cove, and overlooks the old ruins of Tintagel Castle; and it is gratifying to know that the purchase money has been fully subscribed. The Trust is also at work, repairing the old clergy house at Alfriston, an interesting relic of the common life led by the priests of the middle ages. £155 have been already expended, and an appeal made to the readers of this magazine on behalf of the Trust was met with a generous response to the amount of £35. Funds, however, are still urgently needed to the amount of £200 lest the workmen should have to be withdrawn, a serious danger to the building in its present condition. Subscriptions may be sent to Miss Octavia Hill, 190, Marylebone Road, or, to the Treasurer of the National Trust, 1, Gt. College Street, Westminster.

A Plea for the Peewits.—I beg to call your attention to the cruelty that is annually practised on that beautiful bird, the common lapwing. I allude to the custom of taking its eggs till the poor bird can lay no more. Not only does

this prevent a stock of young birds being produced, but it is exceedingly exhausting to the old bird. I should remind your readers that plovers' eggs are a pure luxury, and nothing else. Why should we not in England limit the sale of the the eggs to April 15 (as I believe is done in Scotland), after which date no eggs, English or foreign, should be sold? I hear numerous complaints of the increasing scarcity of these birds, and no wonder.

Y.

An Offer.—Will any of your readers offer a comfortable home to a pair of ringdoves, hatched last summer; fine birds, tame. The owner will be glad to give them to any one who keeps an aviary, or who will not keep the birds confined in a small cage.

4, *Eldon Road, Hampstead.* E. S. N.

NATURAL HISTORY NOTES AND QUERIES.

A Bird Legend.—Your readers may be interested in the following legend about the Indian cuckoo (*Cuculus micropterus*), given in a letter from India to a little boy: "There is such a strange bird here, which always cries 'bo-kot-ta-ko,' all day long. There is a story about this bird. Once there was a man who killed a young woman, and he was so full of remorse when he saw her dying, that he threw himself on his knees beside her body, and said, 'bo-kot-ta-ko,' which means, 'say one word.' But she died, and the king of the birds punished him, by making him into a bird who says nothing else all day, and is never answered."

St. Leonards. H. J. GRAHAM.

Swallows.—On the evening of October 6, six swallows were found inside a bedroom window. They were evidently intending to rest for the night, the rain having scarcely ceased all day. A housemaid living in a semi-detached house in Putney went into her bedroom on the top floor, when it was just dusk, to close her window. She had a lighted candle in her hand, and on entering the room was startled to see two black-looking objects, one in the centre of the window, the other quite in the corner of the window—on the same line. She put the lighted candle near them, and discovered three swallows nestled close together in the centre, lying on the stiff frill of the white muslin short blind. They were resting on the tape and inner part of the frill between them and the glass (the lower sash), their tails hanging down against the muslin. In the right hand corner were three more swallows, quite huddled together between the two sashes. It was difficult to get these three out without hurting them; it seemed cruel to disturb these two happy families, but the window had to be closed for the night. The six birds were taken out quite safely, one by one, and flew away unhurt, out of the window, for other quarters. Numbers of swallows had been flying about the road and all round the house that same evening, and no doubt many more would have come in for shelter. That night was very rough—but not nearly so bad as the following night, Wednesday, October 7. When the candle was put near the birds they did not flutter or seem alarmed. Probably they were weather-wise, and intended to remain two or three days longer in this country until the storms had somewhat subsided.

Putney. E. T.

Swallows in November. I saw four swallows in the neighbourhood of Southsea on November 4 of this year, and a friend saw six or seven circling around a church steeple in Southsea itself on the 8th of the same month.

Southsea. J. E. H. KELSO.

Considerable interest attaches to the dates of the last appearance of swallows and other migratory birds in different districts. Thus the last date on which the redstart was observed here (the Nidd Valley) was August 23, and that of the

fly-catcher August 28. The swallow was seen daily in considerable numbers up to the end of September, and after that only at intervals of some days till October 25. On the forenoon of the latter date the ground was covered with snow, but three or four swallows were observed flitting in front of the house for several hours. Their flight appeared feeble, and they were exceptionally tame, passing repeatedly within a yard of the observer's head, while in the garden paths. A single swallow appeared on October 28, which, after an hour or two, was joined by a second. Since then they have entirely disappeared.

Knaresborough. W.

Ichneumon Flies ? (p. 238).—I am sorry to disagree with Mr. Kirby about the ichneumon fly which Miss Pedder has described. I enclose a rough sketch of the insect that she captured, which I think will prove without a doubt that she is right in considering it an ichneumon fly and not a wasp. Westwood, in his *Classification of Insects*, vol. ii., p. 205, mentions the fact that the ichneumon fly carries along and buries a green caterpillar, in order to feed its larvæ, and it is interesting to find an eye-witness who can corroborate this.

Bath. BESSIE BRYANT.

The drawing certainly more resembles an ichneumon than a wasp; but the veins of the wings are not sketched with sufficient accuracy to determine the species. Unless Miss Pedder brought in the identical specimen with her, and the sketch was taken from this, there can be no certainty that the insect was the same. Westwood does not say that any ichneumon stores caterpillars, he only says that Ray (an author of 250 years ago, when nomenclature was in a chaotic state) saw an insect do so, which Ray called "Vespa Ichneumon," but which was probably *Ammophila sabulone*, *i.e.*, one of the solitary or burrowing wasps, which has similar habits to *Eumenes coarctata*, and which, too, more resembles an ichneumon than the latter. No ichneumon is known to store up caterpillars, &c., but merely to lay eggs in their bodies. The solitary and burrowing wasps store caterpillars, &c., in their nests, as food for their young.

W. F. KIRBY.

TO CORRESPONDENTS.

Mabel Thomas.—The Editor is not responsible for the statements of his correspondents. Please read Rule 4.

M. E. F.—We do not think it desirable to print the statements unless they can be substantiated or refuted.

A. B. M.—We have not seen the article to which you refer, so can express no opinion upon it.

G. E. W.—Apply to Government Printing Office, Washington.

W. J. G.—Mr. C. J. Waddilove, 16, Chalmers Crescent, Edinburgh, will send you Lindsay's *British Lichens*, if you will forward your address and 6d. for postage.

E. S. N.—Please read Rule 3.

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1. All communications for NATURE NOTES must be authenticated with name and address, not necessarily for publication.

2. The return of an unaccepted contribution can only be guaranteed when it is accompanied by a stamped and addressed envelope. We cannot undertake to name specimens privately, or to return them.

3. All communications for any number must be in the Editor's hands by the 15th of the preceding month.

4. Communications for NATURE NOTES should be addressed to the Editor, JAMES BRITTEN, F.L.S., 126, Kennington Park Road, London, S.E., as should specimens for naming, books for review, &c. The Editor cannot undertake to reply privately to questions.

5. Letters connected with the Selborne Society, as well as all enquiries as to the supply of NATURE NOTES, and subscriptions, should be addressed to the Secretary of the Selborne Society, A. J. WESTERN, Esq., 20, Hanover Square, W.

6. The Editor is not responsible for the contents of the last page of each number: communications respecting this page must be addressed to Mr. WESTERN, as above.

SELBORNE SOCIETY NOTICES.

Proposed Summer Excursion to Selborne.—It is proposed to arrange a whole day visit to Selborne during the summer months of 1897. All interested in the contemplated excursion are requested to communicate with the Hon. Sec. of the Field Club, in order that an idea may be gained as to the number who would be likely to attend.

Council and Committee Meetings.—The next meetings of the Council will be held on Thursdays, January 7 and February 4, at 5.30; of the Magazine and Leaflet Committee on January 21 and February 18, at 5.30; and of the Field Club Committee on January 7 at 6.30 p.m., at the Offices of the Society, 20, Hanover Square, W.

Resignation of Miss Edith J. Temple.—At the Field Club Committee Meeting held on December 3, Miss Temple's resignation of the Hon. Secretaryship was accepted with much regret. It was proposed by Mrs. Percy Myles, and seconded by Mr. R. Marshmann Wattson, "That Mr. Ernest A. Nash be appointed Hon. Secretary of the Field Club." The motion was carried unanimously.

Field Club Notices.—Special attention is called to the meeting of the Field Club Committee, on January 7, at 6.30 p.m. The Hon. Secretary (Mr. E. A. Nash) will be glad if ladies or gentlemen who are willing to conduct Saturday rambles during the months of April, May and June, will kindly attend the meeting, or, if unable to do so, will send their names to the Hon. Secretary of the Field Club Committee.

A Plea for the British Butterfly.—The article entitled "A Word or Two with Insect Collectors," by Mr. W. F. Kirby, which appeared in the October number of NATURE NOTES, has been reprinted, after revision by the author, in the form of a leaflet, and is now available for issue. Price 6d. per 100, postage extra.

NEWS FROM THE BRANCHES.

Bath.—On December 5, an interesting and instructive lecture was given at the Museum by Miss Long, entitled "Floral Leaves." The lecture was illustrated by means of the limelight lantern.

On December 19, a discussion was opened by Miss Dolan, with a short paper entitled "Stray Thoughts about the Selborne Society." Mrs. Ashworth Hallett occupied the chair.

Central Branch.—On December 3, Mr. F. W. Ashley, F.Z.S., delivered a most enjoyable and interesting lecture to the members of the Highgate Hill Christian Social Institute.

Clapton (Lower Lea Valley Branch).—Dr. Gerard Smith gave a most interesting lecture on December 5, on "Electric Phenomena *in vacuo* and the 'X' Rays." The lecturer is well-known for his attractive style in imparting knowledge, and in such clearness tinged with humour does he deal with it, that only the most obtuse person would fail to grasp the chief points. His discourse on the latest scientific disclosure was accompanied with experiments in which he explained the molecular theory. A tube which had been specially made for Dr. Smith was exhibited for the first time. He disabused the minds of his hearers of the visibleness of any ray, and pointed out that to the medical profession the "X" rays were invaluable. Photographs by the "X" rays were afterwards taken.

Croydon and Norwood.—A deputation from the Society attended the meeting of the Wesleyan Band of Hope, Westow Hill, Upper Norwood, on December 10, when an address was given on "Nature in Norwood," by the Hon. Secretary. The children were invited to write essays upon the subjects of the lecture in competition for prizes to be given by the Branch.

Shere and Abinger.—On Wednesday, December 9, Professor Boulger lectured at Abinger on behalf of the Selborne Society on the subject of "The Ground Beneath Our Feet."

EDWARD A. MARTIN, F.G.S.,
Hon. Sec. Magazine and Leaflet Committee.

Nature Notes:
The Selborne Society's Magazine.

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OPEN SPACES AND FOOTPATHS.*

IT is one of the errors of modern civilization to suppose that an elaborate political and social machinery is a potent remedy for all the woes and grievances, fancied or real, of mankind. But human will, individual or concerted, is the only motive power of this machinery, and that sometimes breaks down at the very time that it is most needed.

The extensive powers now put into the hands of County, District and Parish Councils to resist encroachments on open spaces and the blocking up of rights of way, would lead us to hope that an Utopia had at last been realized in these matters. Since the establishment of these bodies, however, the truth of the old proverb that one may bring the steed to the water, but that a thousand cannot make him drink, has been more than once manifest. Councillors have their own axes to grind sometimes, and one who is interested in a footpath being obstructed, or a way-side strip being inclosed, will do much to influence his fellows towards adopting a *laisser-faire* policy. Others, too, who are members of these recently created legislative bodies err in ignorance, and their ideas of anything like responsibility regarding public rights are misty in the extreme.

As the sun dispels the natural clouds, so should the luminous treatise of Sir Robert Hunter clear away any fogs of doubt that may overhang the minds of the members of the village parliament as to what action to take when the boundaries of the

* *The Preservation of Open Spaces, and of Footpaths and other Rights of Way*: a Practical Treatise on the Law of the Subject. By Sir Robert Hunter, M.A., Solicitor to the Post Office, formerly Honorary Solicitor to the Commons Preservation Society. London: Eyre and Spottiswoode, 1896, roy. 8vo. Price 7s. 6d.

green have been narrowed, ever so little, by the man who wants more space for his poultry-run or pigstyes. It is possible that some of the less worthy members of the profession to which Sir Robert Hunter belongs are embittered at his unfolding points of law to laymen, which, for their own profit, they would rather had been left obscure. But the means must be made to serve the end, which is to equip, not only the now vast body of representatives, but their still greater electorate, with a guide to such knowledge as shall enable them to combat successfully an evil, the physical results of which come next to sickness and disease. These are strong words, but favourable as public opinion generally now is to the preservation of open spaces, there can be little doubt that there exists among individuals of all classes of landed proprietors a tendency to tamper with public rights. The case for town and country is alike. Open spaces near towns are in more urgent and pressing need of preservation, and are consequently watched more narrowly; but many villages have the possibility of becoming towns, and these have lost both commons and footpaths, too often from want of knowledge on the part of the inhabitants as to how to contest and retain their birthright. It is not saying too much, therefore, to hope that no County, District, or Parish Council will be without a copy of this valuable manual. In plain and intelligible language it unfolds the various points of law relating to every kind of open space, and every form of right of way. The scope of the work falls into these two main divisions, and we propose to give a necessarily limited, though it is hoped a sufficient, survey of each.

A brief record is given of the various rights attaching to a common which can be enjoyed by the tenants of a manor, such as common of pasture, common of estovers (*i.e.*, the right of cutting the gorse, grass and heather), common of turbary, or the right of cutting peat-turf, also the right of digging sand or gravel and of taking wood for the repair of buildings. But unless these rights can be proved to exist, the waste is no longer a common, and either that or the plea that sufficient pasture had been left for the tenants of the manor in compliance with the well worn statutes of Merton and Westminster the Second, have been the means whereby an enormous acreage of waste land beneficial to whole communities has been applied to the profit of individual owners. By an irony of fate in the form of agricultural depression, not a little of that area is again lying waste, this time to the profit of no one. But the Commons Act of 1876, and the Commons Amendment Act of 1893, have absolutely forbidden the lord of the manor to inclose if he wishes to do so under the Statutes of Merton and Westminster the Second, save by consent of the Board of Agriculture (the successors to the Inclosure Commissioners as established by the Inclosure Act of 1845). Should he so endeavour to inclose, previous advertisement is necessary before he can apply for consent of the Board, and

both before and after application he must run the gauntlet of strenuous opposition both private and corporate. If he attempt to inclose without the consent of the Board, his only course is to prove that common rights no longer exist. By patient and careful investigation it is generally possible to prove that some right of common still remains, whether of a free-holder or a copy-holder. And it is important to note that disuse of a right does not necessarily prove that the right no longer exists, unless it can be shown that there was clear intention on the part of the commoner to abandon it. Undoubtedly the power that still remains to the lord of a manor of buying up the rights of all the commoners is for practical purposes a dangerous weapon in his hands, all the sharper when he possesses a register of the commoners. But this is fortunately now counterbalanced to a large extent by Corporations and Urban District Councils being permitted to acquire by gift the soil of a common, or purchase saleable rights attaching thereto, provided the waste be not more than six miles from the centre of the town. Inclosure by way of copyhold grant and by Act of Parliament are similarly now hedged round by difficulties which at one time did not exist.

Recent legislation has also limited the once unhindered and wanton disfigurement of commons by the lord of the manor, highway boards and even by the commoners themselves; but full of interest and importance as this question is, affecting as it does the wild beauty of our English heath-clad wastes, we must pass on to the consideration of those ancient survivals of primitive husbandry—about which too little is known—common fields, meadows and pastures. These in no case bear comparison with an open waste so far as the public are concerned. The latter have no absolute right of access thereto, though in some instances at the present time the meadows and pastures do provide open spaces. During part of the year the common fields and meadows are owned in severalty, while the crops are on the land, but afterwards they are thrown open for promiscuous use by the owners, irrespective of boundaries. Common pastures, however, are rarely parcelled out.

"There is no doubt," says the author, "that a large part of England lay in common fields. In each vill or township there were usually three large fields (or perhaps two or more sets of such fields), in which the three-course system of husbandry was followed, one field in each year being under wheat, one field under barley, and the third lying fallow. These fields formed the bulk or the whole of the arable land of the township. Each field was divided into small strips, originally apparently an acre or half an acre in extent, separated one from another by strips of turf known as balks, linches, lanchards or lanchets. The arable strips were owned and tilled in severalty by the owners, but as soon as the corn was carried the whole was thrown open to indiscriminate pasturage by all the householders of the village."

The remnants of this extensive system are meagre indeed. Inclosures were first made after the dissolution of monasteries, but on a far more extensive scale during the last and present centuries down to 1869. Some important examples of common

lands and meadows at present in existence are the following: the Lammas Lands of Hackney (Hackney Downs, London Fields, Hackney Marshes, &c.), the Common Fields of Barrowden and South and North Luffenham in Rutlandshire, of Steventon, Berkshire, and Riccall, Yorkshire, amounting in all to nearly 4,600 acres, divided into between 7,000 and 8,000 strips. Common fields cannot be inclosed under the Statute of Merton and Westminster the Second, and the only two grounds upon which such an inclosure can be justified are (1) upon the consent of any person having a legal interest or right in the land inclosed, (2) a custom enabling the owner of any plot in the common to inclose and enjoy his plot in severalty on condition that he abandons his right of depasturing over the rest of the field during the open season.

A sketch is next given of the waste or commonable lands of a forest. It is easier and simpler to believe that those splendid tracts of woodland and heath known as the royal forests are remnants of primæval nature, than to suppose they were wastes created for the king's pleasure. Appropriated as such they certainly were, but the fact that rights of common have been enjoyed by the commoners over the whole of the wastes, irrespective of the manors of which they were composed, points to their remote antiquity. Successful proof that these indiscriminate rights had always been enjoyed led to the restitution of half the original acreage of Epping Forest in the great suit of the Corporation of the City of London. Common of pasture is the only universal right enjoyed on the wastes of the royal forests, but in most there exists that of pannage for pigs, or the sending them into the forest to feed on mast—the fruit of oak and beech. In Epping Forest the right of lopping or cutting fuel from underwood, which was successfully contested in the case of Willingale *v.* Maitland* is most remarkable,† and the right of cutting turf in the New Forest is greatly valued. The privilege of cutting furze and heather was successfully upheld by the commoners of Ashdown Forest, in the suit of Lord De la Warr *v.* Miles. Taken altogether, it is far easier to prove forestal than manorial rights on a waste not a forest, as the former are infinitely more extensive.

Village greens are scattered over the length and breadth of our land—nay, there are town greens as well! even in London some fragments of them remain, thanks to the efforts of the Metropolitan Public Gardens Association and kindred societies —not excepting the Selborne Society. Their obvious purpose is that of recreation. When this right is contested, it must be

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* *English Commons and Forests*, by G. J. Shaw-Lefevre, M.P., p. 126. 1894.

† The author is wrong in his statement that that right is actually in existence at the present day. It exists only in principle, compensation having been awarded the commoners for its extinction, as its undoubted validity was upheld in court of law. See *English Commons and Forests*, pp. 152-57. 1894.

proved that it has at some time been enjoyed by the inhabitants of the parish.

That insidious and dangerous form of inclosure—appropriation of common lands for industrial undertakings, chiefly railways—has seen its worst days. Whenever a railway could be carried through common land it was always done; an instance near home to those who dwell in London, is Wandsworth Common. But the vigilance of the Commons' Preservation Society, in opposing at every step each Railway Bill that spells ruin to some tract of heather, fern and gorse, has done much to minimize this evil.

The superiority of the Metropolitan Commons Act (1866), over the Commons Act (1876), as a method of securing regulation over open spaces, is next compared, and it is a matter of regret that provincial commons cannot be placed under a regulation scheme save with the consent of two-thirds of the parties legally interested.

The rights of highroads are little contested, but the obstruction of foot paths and bridle ways is almost a household word. It is curious to see how much more jealous villagers and townsfolk are of foot path right of way than of preservation of open spaces, and what a large part the barring up of these thoroughfares plays in local animosity. The old maxim "once a foot path always a foot path," is fully insisted upon by the author, and the burden of proof is shown to depend, not on cessation of user, but on presumption of dedication on the part of the owner of the property through which it passes. The powers of District and Parish Councils (if only they will use them) are equally strong to hinder and annul these obstructions, as in the case of defending wastes from inclosure.

With regard to roadside wastes, we will but note that hitherto they have been an easy prey to the incloser of common land; but that henceforth no case of such inclosure need ever go unchallenged, under the new authority given to District Councils.

To the inhabitants of seaside towns, whether ports or watering places, and also to the enormous crowd of summer visitors to the latter, the question of foreshore and cliffs as a means of recreation is of especial interest. The foreshore, that is, the land lying between high and low water mark, generally, though not always, belongs to the Crown. The public cannot set up any claim to wander over it, or to bathe off it—indeed, the latter action has sometimes been resisted, though upheld in court of law. Where the foreshore is in the hands of the Crown the public will not be hindered in passing over it, and this will probably be the case when it is in private hands. One sentence, which we quote, calls for comment:—

"The enjoyment of the public cannot be set up to prevent some other use of the foreshore inconsistent with such enjoyment; and such inconsistent use is likely to arise where the foreshore is in private hands."

In framing their bye-laws, it is to be hoped that Corporations and Urban District Councils will in future have regard for the greatest happiness of the greatest number of those visitors who add so much to the material prosperity of their towns, and will endeavour to place some restrictions on the annoyance caused by noisy and vulgar strolling actors, low-minded showmen, and would-be orators. Not only on bank-holidays (on which it might be excused), but daily throughout the summer do these offensive denizens of the metropolis or nearest great city, render the seaside a positive pandemonium to quiet and orderly visitors and residents.

Better than the shore itself is a walk on the cliffs. Often enough there is no right of way even at the very edge of the cliff, but wherever a coast-guard's path exists the public can pass unhindered. "The erection of stiles and gates across the path where it passes through walls and hedges is strong evidence of public right."

The question of right of way on rivers and lakes appeals chiefly to those who boat and sail. Running streams are not all common highways; they are regarded as falling into three groups: (1) public navigable rivers where the tide ebbs and flows; (2) public rivers above the ebb and flow of the tide; (3) private rivers. In those of the first group the soil is held by the Crown, and the public have not only the right of navigating but of fishing in such streams. In the case of non-tidal rivers, the soil may belong to the Crown; it is, however, generally vested in the riparian owners on each side, the middle of the bed marking the dividing line of the properties. The right of passage belongs to the public, but fishing is not allowed to them. Lastly, there are private rivers on which there is no right of way. The river Mole in Surrey was obstructed a short distance above its confluence with the Thames. This was not complained of as illegal, but higher up the stream, from a mill-dam a little below Esher Bridge, up as far as Cobham Bridge, there was a considerable reach fit for small boats and canoes. As a fact boating was largely pursued, but it had begun with the riparian proprietors who let out their boats secretly for what people cared to give. The mill-dam prevented any passage to and from the Thames in any case, putting aside the matter of the obstruction lower down, so the Court held that on the evidence there was no highway along the piece of river in question.

In the present state of the law it is decided that the public have no right to fish without leave in non-tidal lakes or entirely inland lakes, but this is a matter of small importance when we reflect that navigation on them is now entirely unhindered. A visit to the lake district in the north of England would be robbed of half its charms if the richly wooded slopes of Windermere were never to be viewed from the water, or the stern beauty of Helvellyn, Red Pike, St. Sunday Crag, and other fells that crowd round the south-west end of Ullswater, was forbidden to

be seen at its fullest effect, as can only be when we gaze up from the winding lake below.

On Hickling Broad, in Norfolk, fishing and shooting was decided against in a recent case. But when the plaintiff endeavoured to restrain the defendant from entering the Broad, the Court declined to allow this claim. It is fortunate that there is such a precedent. Had the decision been otherwise, other landowners would, if so disposed, have endeavoured to close to the public any broads the soil of which they claimed to own, and in time ruin the whole district as a pleasure resort. The sole pleasures and beauty of the Norfolk Broad district are centred in sailing and boating over those noble stretches of water.

To those who dwell in London it would have been interesting to find what is wanting in this volume, namely, a little information on the regulation of the royal parks which are under the control of the Woods and Forests Department. Hyde Park is open day and night; Regents' Park and Richmond Park are closed at sunset. Meetings are held in Hyde Park, as all our readers know; in Regent's Park they are not, to the best of our knowledge. Cricket is played in the latter, but no games are allowed in Hyde Park. Bathing is permitted in the Serpentine, but not in the Ornamental Water of Regent's Park. Are these balances of public privilege specially arranged?

How far canals are public waterways, especially when they communicate with rivers, is another point upon which the author has not dwelt. The Regent's Canal is strictly private except to barges—at any rate that part of it which passes through London. But the above omissions are of small importance, and for all practical purposes the work as a treatise on rights of way is as invaluable as it is exhaustive.

Not the least useful feature of the book is the series of appendices, comprising the judgment of the late Master of the Rolls in the Hackney Commons case, when the Board of Works (through the Attorney-General) sought to restrain the lord of the manor from removing the soil from the Commons; the Regulation Scheme with regard to Banstead Downs, and the Memoranda as to the Powers and Duties of Rural District Councils and Parish Councils and Meetings, with respect to Rights of Way, Road-side Wastes, Commons, Village Greens and Recreation Grounds.

Upwards of three hundred cases relative to open spaces and right of way have been decided favourably or the reverse in the Law Courts, and well-nigh a hundred statutes nearly or remotely relative thereto are to be found in the statute book of the realm. No mean part, therefore, have our commons and footpaths played in the records of history and the rights of the nation.

ARCHIBALD CLARKE.

NATURE-POETRY.

ONE of the most noteworthy movements of the present age has been what may be termed, in general, the Return to Nature. The pleasures of nature have, no doubt, exerted attractions over mankind in general in all ages, and this has led them to preserve or revive traditions of a golden age, which they endowed with all sorts of unattainable felicities. But it was regarded mainly as a poet's fancy, to be cherished only by ordinary people as a pious opinion of better days long gone by. Wild nature lay for awhile under the ban of mediæval superstition, which looked upon it as the stronghold of the Evil One, to be shunned by all who did not desire too close communion with such a being.

As a modern movement, the return to nature owes its origin largely to Rousseau. He it was who first, among eighteenth century philosophers, transformed into a deliberate conviction what had before been little more than a pious opinion; and he elevated it therefrom into a religious creed. In an age when culture and intelligence were assumed to be inseparable from the city, he kept insisting on the superiority of the life of the country; when wildness was held to be the same as deformity, he gave thrilling descriptions of mountains, forests, waterfalls, and the other great forces of nature; and by rapturous praise of simplicity in education, in dress, in diet, in manners, and in the whole system of living, when society was steeped in every sort of artificiality and self-indulgence, he marked the beginning of a new spirit, of a reverential sympathy with nature, a passionate appeal from the conventional to the innate, which was one of the most characteristic features of the revolutionary era, and was destined to produce momentous consequences upon both politics and literature.

To the influence of Rousseau, in the direction of greater naturalness and simplicity, much was owed by Wordsworth, and much too by Shelley; while the poet-naturalists of a later period, such as Thoreau and Jefferies, may be considered as his lineal descendants in their treatment of problems relating to the comparative merits of nature and civilisation.

It is with those who have been well called poet-naturalists that the poetry referred to has mainly arisen. With them the literary treatment of natural history has been expanded and exalted no less than the poetical conception of nature itself; and the result has been that the idealistic tendency of modern poetry, taking form with an intense sympathy with woods and fields and streams, has affected and permeated such studies even as zoology and botany. In true prose-poetry, if not always in verse itself, these poet-naturalists have shown us that the ideal of nature is to be beautiful and calm; they call attention to the joy in life of all animals and birds, to the lissom bound of the hare, the musical

warble of the thrush, the soft cooing of the dove, the rapturous song of the skylark, the sweeping flight of the rapid swallow; and thus, bridging the chasm that separates the real from the unreal, they clothe the one with the colours and the glamour of the other, write down the response of the soul to the phenomena of nature, and interpret fully the voice of nature as it speaks to the soul of man.

Of such a poet-naturalist it has been well said that

> "Divinely thrilled was the man, exultingly full,
> As quick well-waters that come from the heart of earth
> Ere yet they dart in a brook are one bubble-pool
> To light and sound; wedding both at the leap of birth.
> The soul of light vivid shone, a stream within stream;
> The soul of sound from a musical shell outflew;
> Where others hear but a hum and see but a beam,
> The tongue and eye of the fountain of life he knew."

It is by carrying on such work that the poets become the unacknowledged legislators of the world; and they thereby render to us one of the greatest services that we owe to them. And of the naturalists who speak to us only in their prose-poetry, we can feel that the influence is a real and a growing one. Through their writings town dwellers who cannot go to the country can, by way of solace and refreshment, have the country brought to them. As the desire for an open-air life is intensified among the prisoners of artificial commercialism, and as the very excess of our modern civilisation demands a return to nature, there arises day by day a greater interest in the works of those who have heralded the change. To one of these poet-naturalists who has recently died there are thousands who feel and acknowledge a debt of gratitude as the faithful student and interpreter of nature's soul, who has caught and expressed the fleeting moods and phenomena of nature, as manifested alike in the humblest and the highest of her works. And of him it has been truly said that

> "He showed the soul within the veil of matter luminous and thin;
> He heard the old Earth's undersong piercing the modern din.
> No bird that cleaves the air, but his revealing thought has made more fair;
> No tremulous dell of summer leaves but feels his presence there.
> So though we deem him dead, he speaketh! and the words are sped
> In grassy whispers o'er the fields, by every wild flower said."

The poets who paint pictures of nature for their own sake, without reference, explicit or implied, to the human interest that may belong to them, are to be found in the modern world alone. The poets of old time had always some understood reference to the human interest of the story.

When Homer gives us his beautiful moonlight simile, he seems to call the readers' expectancy to the glorious fighting that was to take place with daylight. In the art of Æschylus and Sophocles, the scenery is left mainly to those sister-arts which the drama calls in to aid the illusion. In the art of Homer the descriptive passages always advance the dramatic action; no such passage seems to have been written for its own sake alone.

The imagination of the older poets is chiefly occupied with the riches and wonderfulness of man's life; to that they give the first place, the riches and wonders of nature are quite secondary: seeming always to bear in mind that "the proper study of mankind is man," they paint nature merely as a background to their main subject of human nature. To this class belong the Greek poets, and their imitators the Latins. Even Theocritus and his followers, in some ways most like the moderns, never arrest the dramatic action of the story, but only make it move more slowly. Dante and the Italian poets proceed in the same style. And even Chaucer and the English school was much the same. Had the trees and rivers Chaucer loved, the daisies that made his heart leap as a child, or the birds whose carols were so dear to him, lost their association with human story, they would by him have been considered to have lost much of their charm. It was the type of a school. These poets did, it is true, personify nature, treated her as a handmaiden, and sometimes designated her as a goddess; and they invented or codified all sorts of rapt myths whereby to display, in their style, her many beauties to popular fancy. Streams became peopled with nymphs; groves had Pan and his goat-footed satyrs; a flying maiden was transformed into a laurel to escape the embraces of too ardent a pursuing lover; and the Darby and Joan of old, happy beings! passed together as a pair of united yew-trees, into an old age of mutual felicity. These were classic times, the golden age, and poets recorded for us its scenes in that famous classic phrase which has passed into or forms part of our modern poetry. Authors who had been familiar with country-scenes often made these reappear, in like fashion, in their poetry. Sophocles sang the praises of his native Colonos, and is even said by Plutarch to have been at once triumphantly acquitted of a charge of imbecility in his old age by reciting to his judges a famous chorus from his Œdipus. Theocritus and the Sicilian poets wrote beautiful idyllic poetry, and passed it over to their imitator Virgil, who was the son of a farmer, and who, along with the reproduced Sicilian landscapes, added much that he had observed about his native Mantua. So it passed on through the middle ages, with many additions from the poets of Italy, Spain, and France.

In our own time this kind of poetry has been, very properly, continued and developed. One of the very healthiest poets that the English race has produced in modern times was Sir Walter Scott; yet both he and his great predecessor Chaucer, show in their poetry the spirit that is content to enjoy the beauty of the world as it is, of which beauty they indicate that the part played by Nature's own loveliness is, in their view, by no means the first; hence they do not linger so long over them as to lead to the impression that they write for this alone. And many of our modern poets, when they treat of Nature, seem to be, at times, as careful as Homer never to let slip the fact that the obtrusion of landscape, however beautiful, can be entirely dispensed with.

But along with these poets there has arisen a class whose imagination seeks to paint the features of Nature in all her beauty, using human story, if at all, as an artistic reason for objective representation alone. They seek to give pictures of Nature painted for her own sake only, to depict her charms and dwell on her loveliness, and to show clearly that to them she is so entrancing as to demand all their powers of description and invite all their faculties in her culture. As the motto of the other poets has been that "the proper study of mankind is man," theirs seems to be the invocation that was addressed to Nature by one of the first of these Nature-poets.

> "O Nature, all sufficient! over all!
> Enrich me with the knowledge of thy works."

Sometimes they burst forth into a kind of ecstasy, and produce a rapturous hymn to the glory of Nature rather than a picture of her features; and this has by some writers been said to be the development of the primæval religion of the Aryan race, though it may, perhaps, be more properly described as the individual expression of certain raptured souls. A specimen of this kind of poetry may be seen in the following verses by Browning, who here displays, through the mouth of his Paracelsus, a truly superb union of the scientific and the poetic visions, in the conception of the rapture of life:—

> "The centre-fire heaves underneath the earth,
> And the earth changes like a human face;
> The molten ore bursts up among the rocks,
> Winds into the stone's heart, outbranches bright
> In hidden mines, spots barren river-beds,
> Crumbles into fine sand where sunbeams bask—
> God joys therein. The wroth sea's waves are edged
> With foam, white as the bitten lip of hate,
> When in the solitary waste, strange groups
> Of young volcanoes come up, cyclops-like,
> Staring together with their eyes on flame—
> God tastes a pleasure in their uncouth pride.
> Then all is still; earth is a wintry clod:
> But spring-wind, like a dancing psaltress, passes
> Over its breast to waken it, rare verdure
> Buds tenderly upon rough banks, between
> The withered tree-roots and the cracks of frost,
> Like a smile striving with a wrinkled face;
> The grass grows bright, the boughs are swollen with blooms
> Like chrysalids impatient for the air,
> The shining dorrs are busy, beetles run
> Along the furrows, ants make their ado;
> Above, birds fly in merry flocks, the lark
> Soars up and up, shivering from very joy;
> Afar the ocean sleeps; white fishing-gulls
> Flit where the strand is purple with its tribe
> Of nested limpets; savage creatures seek
> Their loves in woods and plains,—and God renews
> His ancient rapture."

Of this poetry there was nothing among the Greeks; the type is mainly modern and, some think, a little mystical. To Shelley

we must turn as chief among poets who display this rapture; his poem on the "West Wind," and his "Ode to the Skylark," have never been equalled till the appearance of Swinburne, on whom, in this respect, his mantle seems to have fallen. Swinburne's Nature-lyrics, from the choruses in "Atalanta" down to his latest poems, display this rapture in its fullest form. Keats displayed some of this rapture in his odes to the "Nightingale," to "Psyche," and to "Autumn"; and other poets have at times described sensations of themselves or their heroes, which seem akin to what has been claimed to belong to the primæval religion of the Aryan race. Tennyson portrayed a trance-like state of his own to Mr. Knowles, who reproduced the description in an article on "Aspects of Tennyson" in the *Nineteenth Century*; and the poet himself describes some such state in this passage of his "Ancient Sage":—

> "More than once when I
> Sat all alone, revolving in myself
> The word that is the symbol of myself,
> The mortal limit of the Self was loosed,
> And passed into the nameless, as a cloud
> Melts into Heaven. I touched my limbs, the limbs
> Were strange, not mine, and yet no shade of doubt,
> But utter clearness, and thro' loss of self
> The gain of such large life as matched with ours,
> Were sun to spark— unshadowable in words,
> Themselves but shadows of a shadow-world."

Wordsworth was full of this rapture; and he gave expression to his views in the following verses of what has been sometimes humorously called the "Wordsworthian creed," where, after describing some aspects of natural scenery, he says,

> "These beauteous forms
> Through a long absence have not been to me
> As is a landscape to a blind man's eye:
> But oft, in lonely rooms, and mid the din
> Of towns and cities, I have owed to them,
> In hours of weariness, sensations sweet,
> Felt in the blood, and felt along the heart,
> And passing even into my purer mind
> With tranquil restoration; feelings, too,
> Of unremembered pleasure; such perhaps
> As have no slight or trivial influence
> On that best portion of a good man's life,
> His little, nameless, unremembered acts
> Of kindness and of love. Nor less, I trust,
> To them I may have owed another gift
> Of aspect more sublime; that blessed mood
> In which the burden of the mystery,
> In which the heavy and the weary weight
> Of all this unintelligible world
> Is lightened,—that serene and blessed mood
> In which the affections gently lead us on,—
> Until, the breath of this corporeal frame
> And even the motion of our human blood,
> Almost suspended, we are laid asleep
> In body, and become a living soul:
> While with an eye made quiet by the power
> Of harmony, and the deep power of joy,
> We see into the life of things."

In a later part of the same poem he goes on to say that

> "Nature then to me was all in all.
> From her I ofttimes clearly learnt to hear
> The still sad music of humanity,
> Not harsh, nor grating, but of ample power,
> To chasten and subdue. And I have felt
> A presence that disturbs me with the joy
> Of elevated thoughts: a sense sublime
> Of something far more deeply interfused,
> Whose dwelling is the light of setting suns,
> And the round ocean, and the living air,
> And the blue sky, and in the mind of man;
> A motion and a spirit that impels
> All thinking things, all objects of all thought,
> And rolls through all things."

W. J. C. Miller.

(*To be continued.*)

HYÆNAS.

OF this family of digitigrade animals but three distinct species appear now to be known, viz., the striped, the spotted, and the brown, though in years long gone by, *i.e.*, before the glacial epoch or "Ice Age," there were many other kinds; indeed remains of them have been found in many parts of Europe, and in England, especially in a cave near York, traces of them have been found discovered, and to which palæontologists have assigned the name *Hyæna spelæa*.

In this short account I propose to deal only with the striped hyæna (*striata*), which is to be found in very much the same localities as the Indian jackal, though not in Ceylon. It ranges from India into Persia, Arabia, Egypt and some parts of Africa. Unlike the jackal, however, which is gregarious, the hyæna goes alone, or at most with one or two others of its kind, but it is like the jackal in being nocturnal in its habits, and it is by night only that it is found on the prowl for food. A carrion eater, as I have before observed, it is one of the best of Nature's scavengers, cleansing the earth of putrid animal matter, consuming the carcases of all dead animals, and by the exceptional power of its jaws it is able to crush the largest bones, seeking for the marrow in them which is its most favourite morsel.

If let alone the hyæna does not usually attack man, but I have known it to carry off native children when left unguarded; it is more often on the look out for sheep and goats, and will wantonly destroy numbers in a flock before carrying off one, and curiously enough it has a special *penchant* for mules and donkeys.

In appearance and style it is not unlike the wolf, but it differs from that animal in being possessed of a shaggy mane on the neck and back, and with even coarser hair on the body.

In colour it is of a dirty ashey grey, with black stripes on the legs and part of the body, and often with a black patch under the neck. Its ears are long and pricked up, the eyes project somewhat, and the tail is short and bushy. It is provided with four toes on each foot, with strong claws, and incapable of being drawn back into a sheath as in the case of the Felidæ. Though sturdy in its neck, chest, and fore-legs, it is comparatively feeble in its hind quarters, giving to it when in movement a reeling sort of a gait, and when starting off to run, one instinctively forms the idea that it is lame; but this soon passes off, for it can be very swift, and distance any rider on going down a hill, but when it has to ascend a steep hill a fleet runner can then readily catch it up.

Though a great sneak and a coward, yet with its sulky hang-dog look, and moving as it does with its head near the ground, it is by no means an agreeable customer to meet at night without a good stout stick in one's hand; and yet if taken young it can be readily domesticated, and follow its master like a dog, and in its tamed state it seems to lose most of the offensive odour which hangs about it when wild.

Upon the Madras side we called it a "dammulgundi"; while by some natives it is known by the Hindustani name of "bhalo-kola," or bear jackal. It is often called, too, in Central India a "lukrā bughā." In northern India the term "churruck" is used for it, and in the Punjaub it is known as the "throtta," the literal meaning of which is "broken-backed."

Some naturalists were once of opinion that the hyæna approximated very nearly to the civets, having the rough tongue in common, and being possessed, as it was then thought, of a glandular pouch similar to the civets. This belief has been generally given up, and Mr. John Barlow, who has both hunted and killed many hyænas in the Punjaub, assures me that they possess no such perineal glands. It is well known that from this sac in the civets, as also from the musk deer, perfumers obtain a substance which, when greatly diluted, supplies a somewhat pleasant scent, which is much sought after by the Javanese and Malays, and indeed is not despised by some people in Europe.

For its haunts the striped hyæna prefers the hilly and rocky districts, where there are natural caverns suitable as dens, and when once an animal has taken up its abode for some time in one of these fissures in the rocks, the outside is covered with the fragments of animals and bones of every description. It is so marked a feature that, as Mr. Barlow says, it may well be termed the most "ossivorous" of quadrupeds.

To most of the natives of India the hyæna is an object of great hatred and aversion. There is only one tribe, I believe, who will neither hunt nor kill the animal, and this tribe takes its name of "Lakra" from the Hindustani word for a hyæna ("lakra bagha"). According to Mr. W. Crooke, in his excellent

work on Indian folk-lore, the tribe is to be found amongst the Dhangars of Mirzapur.

In order to rid themselves of these animals when they become numerous and dangerous the natives resort to all kinds of expedients; they make spring traps of steel or stout iron, baiting the same with an enticing morsel, and occasionally they will employ stout nooses to entrap them. In the Punjaub, when a den has been discovered, three or four adventurous villagers, Mr. Barlow tells me, will provide themselves with a coil of stout cord, a pole, a couple of pitchforks, and a small oil lamp, or "chiragh," and proceed to the spot. Generally two men will enter the den, one holding the lighted lamp, and the other the cord, calling out as they crawl in on their hands and knees, "There is nothing here! there is nothing here!" which they believe will put the animal off his guard. When they come upon the brute, the man with the lamp holds it so as to shine fully on the animal's face, and the other man stealthily proceeds to tie its hind legs together; and strange as it may seem, the animal offers no resistance to the binding process so long as the light shines in its eyes; but if by any accident the light should go out the men are at once attacked most fiercely, and with many blows from them, and shouts from their friends outside, it is with great difficulty driven back. If all is successful, however, the men retreat quietly backwards, the one holding the light, and the other paying out the cord, and when they reach the open air the hyæna, or "lukrā bughā," is forcibly dragged to the mouth of the cave, where the two men are ready with their pitchforks to pin him by his neck to the ground. He is then gagged with a short hard stick called a "danda," his fore legs are then also tied together and he is slung on the pole, and so conveyed to the village to be clubbed by the men, or worried to death by the dogs.

It may be interesting to wind up this paper with one or two superstitions that the Punjabis have in connection with this animal. They believe that to tie some of the coarse hair of a hyæna on to a butter churn, or "madham," will ensure double the supply; again, if any native woman is successful in enticing one of these hyænas to eat of a sweet cake called "chooree," he will at once suffer himself to be captured, and even allow his ears to be pierced, and earrings hung upon them. The animal so adorned will, as the legend goes, invariably bring good fortune to the woman by the increase of sons in her household.

J. F. A. McNair.

Swallows in November.—I saw a martin at Wood Green on November 10 last, and also two swallows at Ebbsfleet, and several martins at Dover on November 12. The appearance of a martin at Wood Green as late as November 10 is quite exceptional. The usual time for their leaving that neighbourhood has been the second week in October.

ROUND THE YEAR.*

Round the Year: a Series of Short Nature-Studies. By Prof. L. C. Miall, F.R.S. With illustrations chiefly by A. E. Hammond, F.L.S. Macmillan & Co., 8vo, pp. 295, 72 figs. Price 5s.

It is not the fault of "A Son of the Marshes" that his new book *In the Green Leaf and the Sere* is in some respects the least attractive of his volumes. He must blame his publishers—or some other ill adviser—for the attempt to add to the charm of his writings by the addition of illustrations. There are, of course, artists who would succeed in this attempt, but Mr. D. C. Nicholl, who gives us his notion of birds and their haunts, is not of their number. It would be charitable to suppose that these had been taken from stuffed specimens of an inferior kind; assuredly the giant grass which overtops the nightingales (p. 85) never grew in such a position; never were such rooks seen as those on p. 162; but the climax of absurdity is reached in the alder on which the hawfinch is placed (p. 201)—the marvellous catkins and fruit are unlike anything hitherto recorded in our British flora. Mr. Haité's little landscapes which appear at the heads and ends of chapters are pretty and harmless enough, but the book does not need illustrations, and poor pictures are neither useful nor ornamental.

Yet another grumble. We have never understood why this author's books needed to be "edited by J. A. Owen." At first we supposed that some shyness on his part had only been overcome through Mrs. Owen's encouragement, and that she had, as it were, introduced him to the reading public. But the welcome extended to his articles by various magazines made it clear that continued supervision was unnecessary, and that his own name was sufficient recommendation. We are led to make this comment because the editor contributes a note to this volume in which she "craves indulgence" for "a few errors," on the ground that, for various reasons, she "was unable to see the book through the press." Under these circumstances we cannot help feeling that it would have been better to have omitted Mrs. Owen's name from the title-page; for surely an editor is expected to edit?

For the book itself, apart from its illustrations and the typographical errors, which last are more numerous than Mrs. Owen seems to think, we have nothing but praise. Eleven chapters embrace the course of the year, dealing for the most part with birds—with whom the author always seems at home—but including chapters on fishes, and woodcraft, shooting and shooters, and a very interesting one entitled "Old Recollections," many of which are scattered elsewhere up and down the book. Very true is his reflection "It seems to me that much of the useful as well as the beautiful has been 'improved' away." "Our old farmers," he says, "knew what they were about when they kept the grand old hedges in order—the hedges that afforded shelter, keeping the fields and the stock 'in the loo.' . . . . I have lived to see rows of fine old elms, which formerly shaded green lanes on either side, ruthlessly cut down for no earthly purpose." Alas! the disfigurement of the country, to which we referred last year at some length,† is proceeding apace. For no reason except, apparently, to give employment to the men under the District Councils, hedges are being trimmed to a dead level; the grassy borders of the roads are pared, the hedgebanks stripped; the rural beauty of England is fast becoming a thing of the past, and it seems likely that the paintings of those who pourtrayed it in happier days will soon be the only evidence of the loveliness of the land.

As usual in his books, the "Son of the Marshes" gives us by the way curious items of folklore and local tradition. It is interesting to find him supporting a belief that formed the subject of a question in these pages not long since—the belief that young birds, when disturbed, are poisoned by their parents. His reference to St. Guthlac leads us to hope that our author reads NATURE NOTES. If this be so, and he should see this notice, we should be glad if he would inform

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* *In the Green Leaf and the Sere.* By A Son of the Marshes. Edited by J. A. Owen. Illustrated by D. C. Nicholl and G. C. Haité. Kegan Paul & Co., 8vo, pp. 288. Price 7s. 6d.

† NATURE NOTES, 1896, p. 141.

us (in confidence if need be) of the mischievous purposes for which the scarlet agaric is employed by rustics; he has referred to this elsewhere as well as in the present volume.

Prof. L. C. Miall's *Short Nature-Studies* differ in style from the essays we have been considering. They are more various, more definitely instructive—which by no means implies that they are wanting in interest, as every one who has read the author's *Object Lessons from Nature* will understand. The book is really a kind of diary for 1895—a diary concerning things which happened to interest Mr. Miall at the time, and had not been fully discussed in elementary books. He awakens our sympathy in his very first entry, for we, too, have known the difficulty of distinguishing the adder's tongue, and the subsequent ease of finding it when once the eye had been taught to recognize it. Selbornians will be delighted with his notes on the characteristics of Gilbert White, which we hope, when space allows, to do ourselves the pleasure of quoting; meanwhile, his testimony to the perennial value of White's book may be cited: "I can, after forty or four hundred readings, take up the *Natural History of Selborne* again, and brighten with it that last hour of the day when work is put aside, and the house is still."

Many original suggestions are scattered up and down the book. *e.g.*, "I should much like to see a British Flora which would be intelligible without a dictionary to anybody who would first take the trouble to master the structure of half a dozen plant types. The thing could be done, and if done in a human way, without respect to the scruples of highly special students, would do much to enlarge the body of working naturalists." We remember that some years ago Mr. Ruskin, in conversation, said something of the same kind, though his ambition was also to produce a really good figure of every British plant. The chapter on moorland plants, from which we quote this passage, is one of the best in the book, and shows that Mr. Miall has qualifications for the task he has suggested. Other essays of special interest are those on "Weeds," "The Cabbage Butterfly," "Cabbages and Turnips," and "The Cuckoo"; but where all are so good it is difficult to particularize.

This is an excellent example of a class of book which is often very badly done, and is as different as possible from the wearisome compilations which are still too frequently met with. The reason is that Mr. Miall has observed the things he talks about. As he truly says, "All the naturalists in the world could not exhaust the subject;" this being so, it is to be hoped others will follow on his lines—a genuine observer will always find welcome recognition. The numerous illustrations by Mr. A. R. Hammond add considerably to the usefulness of the volume.

SELBORNIANA.

The Bullfinch.—Can any of your readers help me to "whitewash" the character of the bullfinch? A gardener in our neighbourhood systematically kills all bullfinches, because he says they eat the tender shoots of the gooseberry bushes. Can it be proved that they eat the shoots that are infected with some grub?

EDITH M. MOIR.

Ling Cottage, Shottermill, Haslemere.

[We fear that a correspondence on this point may prove almost as voluminous as that on the sparrow, some years back, and will therefore ask that answers to Miss Moir's questions should be sent to her direct.—ED. *N.N.*]

Wholesale Slaughter of Robins.—It seems a prevalent fashion for ladies to wear ball dresses trimmed with robins' feathers, and hundreds of these little birds are killed for the purpose. I was conversing with a man who plies the trade of trapping robbins; he informed me he skins them, and sends the skins (with the feathers on) to London, for the above purpose. Is not this barbarous way of adornment a disgrace to society?

Cranbrook. A. W. H.

The Royal Buckhounds.—We are glad to see that public opinion is being aroused on this subject, and that steps are likely to be taken to suppress this "sport." The *Daily Chronicle* and the *Star* have devoted well-informed articles to the matter, and the *Sportsman* "hears on what should be good authority that the hunting of deer will be discontinued, and fox-hunting substituted."

Tame Birds.—I should strongly advise Mrs. Brightwen not to release her blackcap and nightingale, as she, in the course of her most interesting article (pp. 1-4), says she hopes to be able to do next spring. There may be little doubt about their ability to forage for themselves during the summer whilst in this country, but I think it highly improbable that birds, pampered for a considerable period of their lives—to say nothing of being artificially reared almost from the egg—would be able to successfully accomplish the long and arduous journey to warmer climes, on the approach of our winter. Under the best of conditions a large proportion of the migrating birds undoubtedly perish; and the old law of nature, that the fittest shall survive, thus drastically applied, would I feel sure inevitably end in the death of Mrs. Brightwen's pets. It must also be remembered that the life of a wild creature is not all honey, and in my humble opinion, a bird or animal taken in hand by Mrs. Brightwen is considerably better off than the majority of its wild compeers, and I believe some of them know this, or if not would soon become aware of it if thrown on their own resources. In the same way a young savage taken from his native wilds, and reared among civilized folk, although trammelled by many of the usages of civilization, is yet on the average, if rightly treated, decidedly proud of his altered condition, regarding a lapse into his former unfettered state, with all its hardships or even with absolute freedom, as an event much to be dreaded; and who shall say that a thoroughly well treated bird does not think likewise?

W. Naunton Rushen.

Encouragement.—"Lady Aberdeen, wife of the Governor-General of Canada, writes to Mr. George T. Angell, editor of *Our Dumb Animals*, in regard to the wearing of egrets' plumes obtained by destruction of the birds and their young at breeding time, in which she writes: 'I frankly confess that I have allowed these plumes to be allowed on my own bonnets without realizing how they were obtained. And I hope the Toronto Humane Society will be able to persuade the women of Canada, as they have persuaded me, to put their faces against this custom. I have always felt that the wearing of little stuffed singing birds on hats not only destroys all of our songsters but is inartistic, and I am glad to think the fashion is passing away, giving place to artificial flowers and grasses.'"

[The correspondent who sends this paragraph gives no reference to the paper from which it is taken, sends no name or address, and sticks it on the back of a post card, contrary to postal regulations. This is a good example of how *not* to do it.—Ed. *N.N.*]

NATURAL HISTORY NOTES AND QUERIES.

Great Northern Diver.—Mr. O. V. Aplin, in his review of Mrs. Blackburne's *Birds from Moidart*, calls the statement that the great northern diver breeds in Scotland an inaccuracy. Five or six years ago a friend of mine showed me the eggs of this bird which he had taken in the north of Scotland.

Thetford. Edmund Thos. Daubeny.

I know for certain that a pair of these divers bred last year, 1896, and have done for several years past, not very far from Roshven, where Mrs. Blackburn lives. But for obvious reasons it would not be wise to indicate the position more precisely. Ernest U. Savage.

Douglas, Isle of Man.

Starling and Gull.—My friend and neighbour, the Rev. C. B. Young, Rector of Newton Ferrers, tells me that one of their ringers, who is a fisherman, told him that a few weeks ago, while he and his father were out to sea after pilchards, they saw a starling on a gull's back. When the gull came near

the boat the starling tried to escape on board the boat—he was evidently tired out, and fell into the water two or three times, but eventually succeeded in reaching his refuge. The fisherman picked him up, and put him in an unlighted lantern in the cuddy, where the starling immediately went to sleep till the boat got home to harbour. Then, on being liberated, he flew away quite well. It is nice to think the fishermen were so merciful to the bird. These fishermen's word is quite to be depended on, and they told the story without considering it a very extraordinary occurrence.

Modbury Vicarage, S. Devon. C. G. GREEN.

Miss Corelli's Botany.—What is the poison-flower mentioned in the *Sorrows of Satan*, chap. xxvi.—"the poison-flower which, brilliant in colour and perfect in shape, exhales death to those who pluck it from its stem"? Has it been noted that Satan, according to Miss Corelli, has denounced the destruction of Foyers? (see chap. xl.). G. S. R.

[We do not know the "poison-flower," and former attempts to obtain enlightenment as to the plants described in Miss Corelli's books have proved unsuccessful (see *N.N.* 1896, p. 213). We presume, however, that the flower in question belongs to the same class as the "bog-oak" of Miss Corelli's *Mighty Atom*.—ED. *N.N.*]

ANSWERS TO CORRESPONDENTS.

R. B. L.—You will see that your suggestions have been adopted; we shall watch the result with interest.

M. S. J.—The information given is insufficient for purposes of determination.

J. R. and E. A. S.—Nothing would induce us to reopen the "sparrow question."

H. E. W.—Please read Rules 4 and 5. The illustrations of Fungi have long been out of print. You might find Cooke's *Edible and Poisonous Mushrooms* (S.P.C.K.) useful.

Mrs. S.—Please read Rule 5.

Z. J. E.—Probably the Marsh Tit (*Pœcile palustris*).

M. C. B.—We are entirely of your opinion, but the matter does not rest with us.

G. C. G.—We cannot possibly guarantee the insertion of communications the month following their arrival. If we had as much space at our disposal as the *Field* this might be possible. Please read Rule 4.

Mr. Culcham.—We have no recollection of having received your question, nor do we find it in our *N.N.* pigeon-holes. Please read Rule 4.

RULES FOR CONTRIBUTORS AND CORRESPONDENTS.

1. All communications for NATURE NOTES must be authenticated with name and address, not necessarily for publication.

2. The return of unaccepted contributions cannot be guaranteed. We cannot undertake to name specimens privately, or to return them.

3. All communications for any number must be in the Editor's hands by the 15th of the preceding month.

4. Communications for NATURE NOTES should be addressed to the Editor, JAMES BRITTEN, F.L.S., 126, Kennington Park Road, London, S.E., as should specimens for naming, books for review, &c. The Editor cannot undertake to reply privately to questions.

5. Letters connected with the Selborne Society, as well as all inquiries as to the supply of NATURE NOTES, and subscriptions, should be addressed to the Secretary of the Selborne Society, A. J. WESTERN, Esq., 20, Hanover Square, W.

6. The Editor is not responsible for the contents of the last page of each number: communications respecting that page must be addressed to Mr. WESTERN, as above.

SELBORNE SOCIETY NOTICES.

Publication of "A Bibliography of Gilbert White."—The octavo edition of the Bibliography (3s. 6d.) has now been issued. The work has been added to the Society's List of Publications, and can now be obtained of the Secretary, price 2s. 8d., postage 4½d. extra.

Donation to Leaflet Fund.—The Council acknowledges with thanks a donation of £2 to the Leaflet Fund, presented by the Rev. H. E. Luxmore, of Eton, towards the cost of printing and distributing Mrs. Litchfield's leaflet on "The Cruelty of Wearing Ospreys."

"A Plea for the British Butterfly."—The article entitled "A Word or Two with Insect Collectors," by Mr. W. F. Kirby, which appeared in the October number of NATURE NOTES, has been reprinted, after revision by the author, in the form of a leaflet, and is now available for issue. Price 6d. per 100, postage extra.

Field Club Meeting. — On Saturday, February 20, Mr. J. S. Comrie, F.R.B.S., has kindly consented to conduct members over the Church of St. Bartholomew the Great, Smithfield. Members and their friends will meet at the entrance in Bartholomew Close at 3 p.m.

Donations to the "Selborne Library."—The Librarian reports the receipt of a copy of "A Bibliography of Gilbert White, the Natural Historian and Antiquarian of Selborne," by Edward A. Martin, F.G.S., and the Council acknowledges its receipt with thanks.

Proposed Summer Excursion to Selborne.—June 19 has been provisionally fixed as the date for the proposed whole-day visit to Selborne. The Secretary will be glad to hear from those who are likely to attend, in order to gain some idea as to whether the proposition is favourably received by the Society.

Conference of Scientific and other Societies at Tunbridg Wells.—Notice has been received of the Conference, on May 21 and 22, at which a delegate from the Selborne Society will be present.

Council and Committee Meetings. –The next Meetings of the Council will take place on February 4 and March 4, at 5.30, and of the Magazine and Leaflet Committee on February 18 and March 18, at 5.30.

NEWS FROM THE BRANCHES.

Clapton.—At the Monthly Social Meeting held on January 9, Miss Edith J. Temple read a very interesting paper on "The Distribution of Seeds," and exhibited numerous specimens showing a great variety of form. During the evening Miss Temple and Mr. W. S. Durrant kindly entertained the audience with songs and recitations.

Croydon and Norwood.—A Lantern Lecture was given at the Woodside Church Schools on January 22 by Mr. E. A. Martin, F.G.S., entitled "A Peep into Nature." The evening was arranged in conjunction with the Society for the Protection of Birds. Mrs. E. Phillips, Vice-president of the Society, occupied the chair, and gave a short address in welcoming the children to the entertainment. The slides were kindly lent by the Society for the Protection of Birds and the Humanitarian League.

Ealing.—Mr. H. W. Ravenshaw has issued an appeal to the members of the Branch, in which he refers to various methods by which each can do work in furtherance of the aims of the Society. With G. R. M. Murray, Esq., Keeper of the Botanical Department of the British Museum, as President, a large accession of earnest workers is anticipated.

Havant.—An important paper on "The Economic Value of Birds" was given by Dr. J. E. H. Kelso, at the Town Hall, Portsmouth, in which an opinion was expressed that much assistance might be rendered by County Councils if they would put in force the legal powers they possess against egg and bird stealing. Discussion was carried on by Mr. C. Foran, General Drayson, and Capt. Chippendall Healey, the Hon. Sec. of the Branch.

EDWARD A. MARTIN, F.G.S.,
Hon. Sec. Magazine and Leaflet Committee.

Nature Notes:

The Selborne Society's Magazine.

No. 87. MARCH, 1897. Vol. VIII.

UNFREQUENTED FIELD-PATHS.

"YOU had better go round by the road, sir: it is fearfully muddy across these fields," is a piece of advice the pedestrian often gets when enquiring his way across country. Upon receiving such advice myself, two thoughts have occurred to me. One is, that the local rustic appreciates a muddy footpath as little as does the townsman; and the other, that it is more than likely that many a field-path becomes lost to the public through partial disuse and neglect consequent upon the proper authorities not being compelled to keep such right-of-way in a reasonable state of repair. At the recent trial of the Tunbridge Wells footpath case, the listener could not help but have the conviction forced upon him more and more as the case proceeded that the cause was in great part being lost on this account. And I may here say that although the result of the action was lamentable, no one, after hearing the confused mass of evidence, could come to any other conclusion than that Mr. Fred. Roberts had not been able to substantiate the claim of the public to the path in question. I should like, however, to draw attention to several matters which were repeatedly urged by the plaintiff's counsel, but which the other side evidently did not deem to be worth contesting. Mr. Fred. Roberts, it may be explained, although claimant on behalf of the public, was defendant for trespass, the onus of proving the path to be a public one thereby lying upon him.

In the first place it was held that a certain portion of the path, which was described as running down towards a stream or brook, was often impassable, there being a bog or morass extending for some distance from the stream, and across which the path had to pass. A great deal was made of the existence of this bog, and also of the fact that there was no bridge by

which the stream could be crossed. Aged witnesses, however, declared that there once used to be a plank across the stream, and that sometimes it would get washed away, and had to be brought back. But this evidence, coupled with the fact that the stream could at most times be jumped, did not appear to have so much weight as that tendered to the effect that, when the Yeomanry crossed the stream on their way to their rifle-range, a horse upon one or two occasions got "bogged," and had to be pulled out of the mud. Now, considering that there was not the least suggestion of claiming the path as a *bridle-path*, it was difficult to gather what this had to do with the case at all, and yet it was put forward without protest as one of the reasons for disallowing the claim. The very fact of the path at this point being a bad one—so bad, indeed, that probably no one but a farm-labourer in thick boots and gaiters would dream of using it in wet weather—is a fair reason for assuming that it had been neglected, perhaps almost entirely disused, for several decades of years. And how does it then follow, as was inferred, that the remainder of the path, in order to be a public one, should be plainly defined or easily recognisable? What rambler among the bye-ways of the country could not point to a dozen such faintly-defined and impassable though public paths?—paths which are a disgrace to the authorities who should look after them; and, for my own part, I entirely dissent from the suggestion that a horse getting "stuck in the mud" is conclusive evidence that a pedestrian is bound to follow his example. It is an old saying that "What is everybody's business is nobody's business," and to nothing does this apply more forcibly than to the keeping in repair of public stiles, foot-bridges, and field-paths.

Another point of which much was made was as to the "reputation" of the path—"Was it spoken of as a public path?" and so on. The old fellows to whom this question was put hardly seemed to realise its meaning; and undoubtedly if a path is a public path, it is *not* "spoken of" at all, until the right of way along it is contested. The only reputation in the present case appeared to be one of neglect. Therefore, assuming even that there was a recognized right of way across the stream at some time or other, it is highly improbable that many of the younger generation would have known of such. Hence the difficulty of attempting to establish the right, the more especially as the old stiles and way-marks had rotted away and not been renewed —for I think there was mention of at least one stile having formerly been in existence.

Then as to locked gates. Evidence was given against the alleged right of way in that there used to be across the path a gate which was occasionally locked. This, indeed, appears to have practically settled the case, and it undoubtedly seems only reasonable that if a landlord can put up a gate and lock it, without any opposition being raised to the act, a very strong indication is thereby afforded that the road or path thus shut off is

merely a private and not a public way, and that anyone getting over the gate is liable to an action for trespass. But this gate does not appear to have been locked or fastened for the express purpose of keeping the public out altogether. It was stated that at times when litter was cut, the gate was sometimes fastened to prevent the litter being surreptitiously taken away. Apart from this, however, my own experience leads me not to place too much reliance upon the evidence of a locked gate. The latter is, as often as not, as much the cause of a public path falling into disuse as is a "reputation" for badness; therefore, seeing that it is no actual crime to lock a gate across a public path, is it to be wondered at that farmers should sometimes seize the opportunity? If they can do so without attracting attention, it is really a very common practice for farmers to lock and fasten their gates. I remember an instance myself where I was thrown off the lay of a path by a locked gate, from which the path I was seeking started as a cart-track. I desisted at the time from proceeding past the gate, but it so happened that I afterwards discovered my abandoned path to be really a public right of way after all, and, therefore, happening to meet the farmer, I spoke to him about it. He said that he merely put a lock on the gate because it was so often left open, and his cattle got out of the field. In answer to a further question as to why he did not place a stile beside the gate, he simply gave a shrug and said that folks could as easily get over the gate as a stile if they wanted to use the path. Now, this occurred upon a path which is fairly well used, and of the public right over which there was no question. Therefore, I maintain that if an owner can put up a gate and lock it across a notoriously bad path—one in such a condition as to be but seldom used, and of the retention of which no one seems to have any concern—it does not form so conclusive a piece of evidence against the public as if the obstruction appeared across a well-beaten path where objection would more likely be taken to it.

One more point, and that is with reference to the Yeomanry rifle-range, which it was stated had been in existence for some twenty years, and the line of fire of which passed overhead across where the path dips down to the stream. Now, when the Yeomanry established their range, it seems they utilized the path in question as a means of reaching the firing-points, and it is a significant fact that upon one of the occasions when a horse was "bogged," it was in consequence of a member of the corps having been sent to warn off some people who were on the other side of the stream. Presuming that the path was a public path before the Yeomanry came, it had evidently, in consequence of its badness, even then practically fallen out of use. It is to be regretted, therefore, that a champion with the experience and perseverance of Mr. Fred. Roberts did not at that time come forward and get the matter threshed out, for that was before the Yeomanry had made the bank across the

bog and the bridge over the stream; and, of course, before so much uncertainty had been imported into the matter.

With reference again to the rifle-range, Mr. Roberts was asked during cross-examination whether it was not an unusual occurrence for a rifle-range to be alongside a public path, and his reply that "It was the rule rather than the exception" was mistakenly received as a mere exhibition of smartness. To the next question, his reply that "You will generally find a rifle-range has a public path running into it at some point or the other," although sounding strangely, can scarcely be contested by those who are acquainted with the various rifle-ranges of the country. There seemed to be a somewhat unwarrantable idea that Mr. Roberts and his witnesses should be regarded as "awkward customers," whom it was necessary to discredit and "put down." Indeed, one poor old rustic was so belaboured by counsel about the misdoings of a brother who had once been convicted of poaching, that, although there was not the shadow of an insinuation against his own character, he lost his balance, gave hesitating and rambling replies, angered the judge thereby, and as a consequence of his cross-examination, did more harm than good to the case, for like many other of the witnesses, he allowed the opposing counsel to cleverly lead him off the disputed way and describe as public other paths which were not claimed by the defendants. As his lordship remarked, the defendant's case undoubtedly suffered through the multiplicity of the paths claimed by the various witnesses. Indeed, no one listening to the evidence of these poor old rustics, whom opposing counsel had little trouble in getting into an inextricable muddle as to which was the public path and which was not, and comparing it with that of the educated class, which gave firm, compact, and corroborative evidence for the other side, could doubt which way the judgment would go.

Considering that the case had been very strongly supported locally among the better class of residents, that no less than seventeen witnesses, most of them old folks who had lived all their lives in the district, came forward to give evidence as to the existence and use of the path, and that legal opinion it is to be presumed had been taken that the matter was worth fighting, it does seem amazing that the case should have so entirely fallen to pieces as it did. If, as I have heard it suggested—whether rightly or wrongly I know not—it was through lack of sufficient funds, another reason is thus formed for the establishment of a special tribunal for the settlement of rights of way cases, where the poor man would not be so handicapped in opposing his richer neighbours as is the case at present.

It may be argued, "Have you not the Commons Preservation Societies, which also deal with footpath questions?" Yes, certainly, but very few have any idea of the mass of work which the executive of these societies has to deal with. Besides, they are entirely voluntary institutions, being supported only by the

subscriptions of the public. Many of the cases which come before them they are able to settle in an amicable manner, but when a contest occurs, and legal aid has to be invoked, they are entirely unable to proceed without an appeal for special subscriptions. This is not as it should be.

A deal of trouble, however, would be saved if every parish had its map—and in duplicate for safety—with all public ways plainly marked upon it for all time. Disputes as to rights of way would then be less frequent. But in the meantime there really ought to be help forthcoming from public sources for those who, while unselfishly upholding the rights of the public, find themselves saddled with an expensive law-suit. It is, however, not to be assumed that upon every occasion when a dispute arises public money should be expended in setting it right. The court would probably find more than enough work to do upon these terms. But when a case such as that just referred to is backed so strongly by local support, surely a guarantee is created that the matter is a *bona-fide* one, and assistance might very well be forthcoming in order to give the public side of the question an equal chance with that of its opponents. The lack of monetary support on the part of the public to these cases is indeed the opportunity of those who would snatch a convenient stretch of common or way-side waste, or quietly close an unfrequented path across their lands. As an example of this often urgent need of monetary help, it is well known that it was only through the liberality of the Corporation of the City of London that West Wickham Common was at the last moment—when all other resources had failed—saved from enclosure, and I think the same may be said of the saving of Burnham Beeches. The local councils, as a rule, are not keen upon taking up rights of way questions. They know that among other disadvantages their settlement is both costly and uncertain. It is, however, satisfactory to find that the County Councils can compel them to undertake these duties, as witness the recent report and decision of the Surrey County Council in the case of the ancient highway through Marden Park.

WALKER MILES.

Birds near London.—I saw a woodcock fly over, as I was walking through Springfield Park, Acton, on Sunday, February 7. He was heading for Wormwood Scrubbs and Willesden Fields, that happy hunting-ground of native sportsmen, who, on Sundays especially, appear to be prepared, at a moment's notice, to shoot anything, from a man to a hedge-sparrow. I have seen several kingfishers on that little brook and its tributary, the Ravensbourne, that runs in the valley between Penge and Beckenham, and am also sorry to say I was shown one that had just been shot there.

A. J B.

NOTES ON LONDON BIRDS IN 1896.

LONDON thrushes usually sing on New Year's Day; I heard several in Kensington Gardens on January 1, 1896. Two linnets flew over Hyde Park on January 3, and the only skylark which I noticed during this month was flying over Hyde Park on the 4th.

Towards the end of the month a fine white swan, which had lately been frequenting the Serpentine, appeared to be making advances of an amatory nature towards the black Australian swan, but he soon got tired of his "dusky queen" and flew off before the beginning of February. Where he went to I do not know; but one of the keepers told me that the bird had come from St. James' Park, so he probably returned thither.

On February 6 I saw an adult lesser black-backed gull over the Thames near the Temple. Mr. Rushen (NATURE NOTES, 1896, p. 56) considers it as common on the Thames as the common gull or kittiwake; but this has not been my experience, though I have often seen immature birds which may have been the young of either this species or of the herring gull, which they very closely resemble. With regard to Mr. Rushen's note above referred to, I have no doubt he is right in his opinion that Battersea Park is a better hunting ground for wild birds than the West End parks; it is less closely surrounded by buildings, its position beside the Thames makes it much more likely to attract water birds, and the smaller species which pass up the river no doubt frequently take a rest there.

The early part of 1896 was so warm that there were comparatively few sea-gulls on the Serpentine, and those which I saw seemed all to be of the black-headed species; but a fair number were to be seen during January and February between Blackfriars and Waterloo Bridges, many of them being adult herring gulls. There was a considerable influx of black-headed gulls during the first week in March, but the invasion did not last long.

On March 6 I heard a greenfinch near the Magazine in Hyde Park. On March 5 I observed a chaffinch in Lincoln's Inn Fields, on the 8th one was singing in Kensington Gardens, and on the 10th I heard one in Green Park.

The island in the Serpentine was much used during the winter 1895-6 as a roosting-place for starlings and woodpigeons. The starlings used to arrive in hundreds shortly after sunset, flying in companies towards the island, usually from the west, until they got directly above it. They then dived down almost perpendicularly into the trees and shrubs. The woodpigeons, about fifty in number, had usually already taken up their position for the night before the arrival of the starlings. Both species continued to frequent the island throughout the summer, but in smaller numbers. Starlings seem fond of these metro-

politan islands; they roost in the same way in Battersea and St. James' parks.

On April 10, after searching daily for some time, I was glad to discover that the poor persecuted crows had built a nest in Kensington Gardens, and no doubt it contained eggs, for one of the birds was sitting. I cannot, however, say that I saw any young birds, although I kept a look-out for them during the summer. On April 9 my sister heard a willow-wren and saw a swallow in Kensington Gardens. On the 24th I noticed the first brood of young ducks on the Serpentine. On the 26th, a bright Sunday morning, I was in the Gardens before breakfast and found the lesser whitethroat, blackcap, and willow-wren, and the same day heard a chiff-chaff. There was a common whitethroat in Kensington Gardens on May 8, and a reed warbler on the following day. Spotted flycatchers appeared on May 11, a few pairs of these birds spent the summer with us as usual, and I saw them up to the end of August when I left town for a holiday. On May 27 a cuckoo was reported to me from Holland Park, and one—probably the same bird—was heard from Earls Terrace, Kensington, on the 31st.

Unfortunately, the rooks did not nest in Connaught Square in 1896. June and July were very hot, and I did not come across anything of ornithological interest in London during these months.

On August 3 I heard a blackcap singing a few notes near the Magazine and two willow-wrens in Kensington Gardens. There seemed to be an influx of this species about this time, for on the 4th I heard about a dozen willow-wrens all in song, and on the 20th three were singing at the same time.

On August 21 I noticed a linnet in Hyde Park. On the 25th there were about a dozen sand-martins flying over the Serpentine and Longwater; the next day there were a few more, and on the 27th their numbers had increased to at least a hundred. On August 28 I heard another willow-wren in Kensington Gardens, and saw a swift there, and on the same day a robin paid a visit to New Square, Lincoln's Inn.

I was not in town in September until the 23rd, when I found hundreds of sand-martins and a good many house-martins flying over the Longwater. On October 6 the sand-martins were still there, but they left after the 8th. I went out for a spin on my bicycle before breakfast on the morning of Sunday, November 22; it was dark, raw and cold, but my energy was rewarded, for I passed a chaffinch in Redclyffe Gardens, and not less than a dozen thrushes were singing splendidly in Battersea Park.

On November 30 I saw a wren in Kensington Gardens—the first I have seen there for some years, though formerly they were quite fairly common.

I have no notes of any interest relating to birds seen in London last December.

A. Holte Macpherson.

SOME CANADIAN FEATHERED FRIENDS.

IN the summer of 1895 I was in British Columbia, near Vancouver Island, and it was there that I had the opportunity of seeing several interesting birds. The first to be mentioned is the great black woodpecker (*Picus martius*). It is not very large—in fact no woodpeckers are as large as many people imagine them to be; it measured about seventeen inches from the tip of the beak to the end of its tail. These measurements were taken from an adult bird which I shot: not for sport, mind, but to examine it more closely than otherwise was possible. The colour of the great black woodpecker is, as its name implies, a beautiful glossy black, the top of its head being a brilliant red. The trees which these birds inhabit in British Columbia are a species of giant pine, called Douglas fir, which in some known cases exceed two hundred feet in height; also cedars, which are common there and grow to a huge height. As you are walking, perhaps along a road or trail in the heart of the virgin forest, with gigantic trees on every side and thick underbush and brush, you are suddenly arrested by a series of sharp taps, which sound at first like someone hammering a nail into a wooden stake. Tap-a-tap-tap! and you look up in the direction from which you heard the sound. Perhaps it is not far from the ground or it may be some way up, but you soon fix your eyes on the author of the sound. There he is, hammering away on some half-rotten or dead tree as if his whole little life was wrapt up in his occupation. Now he gives a few sharp taps, and then up he runs perpendicularly a few inches, and then tap, tap again, now on one side of the tree, now on the other, always busy, always tapping. But see! he has caught sight of us staring at him, so round he pops to the other side—just as a squirrel does when you scare it—and off he flies to a neighbouring tree, often without our notice, to commence operations again or to renew them either where he has himself been before, or where some other woodpecker has been working.

A number of rotten stumps without branches, standing stiff and gaunt, are literally turned inside out by these busy little excavators in their search for food. I also saw several species of pied woodpeckers, whose habits are very similar to the foregoing bird.

Among many other birds of interest was a kind of pigmy owl, a very quaint and amusing little fellow. One day I was walking along by the side of the road, with a bit of open ground a few yards square on one side, surrounded by the bush, when something plump and soft brushed past my face, making me jump. I threw up my hands and the bird settled down on the bit of ground and stared at me most solemnly; it was holding a dead mouse firmly in its beak. There it sat and stared at me, and there I stood and stared at it. I cautiously advanced a few feet,

when, uttering a low sort of disappointed hiss, and dropping the mouse, it flew off into the bush. I picked up the mouse—quite a large one, and evidently only lately dead. I laid the mouse down close to the spot where I had seen the little bird, and went away. I revisited the place several times afterwards, hoping to see my little friend again, but there was the mouse, just as I had left it, and I never saw that owl again. It was frightened away, apparently, from that part for good, or else it would not deign to touch anything tainted by human fingers. Another time, in quite a different part of the island—in fact, more than eleven miles away—I was driving home with my cousin late at night; we were going up a hill, and there on the right of us was a low rotten tree, with only one solitary naked branch sticking out towards the road, and on it, perched side by side, nestling against each other, winking and blinking in a most ludicrously solemn way, were two little owls, taking no notice of us at all.

Another bird, called there the night-hawk—which is a kind of nightjar (*Caprimulgus*), commonly called a goat-sucker—is very common in British Columbia. Towards evening, about sunset, great numbers of these birds may be seen flying hither and thither overhead, wheeling about and uttering their rather harsh note—which is not at all unpleasant—"whe-eep." They live on flies and other insects, do not suck goats, and are not hawks at all in any sense of the word. Let us watch one particular bird in its interesting flight. Every now and then it makes a curious noise like a kind of bur-r-r! which is caused by its wings when it swoops downwards after some insect. The old birds seem to hunt in couples, and generally keep the young birds of the first year with them, so that one often sees quite a family party of nightjars. The night-hawk seems to be quite a night bird. I have seen it out as late as twelve, midnight, and very likely it is about earlier still, in the morning. The flight of this bird is very soft and gliding, with the feathers in the tail spread out fanwise, so that the white spots underneath are clearly seen.

Among birds which live near rivers or on the sea coast is the belted kingfisher (*Ceryle alcyon*), so called because round its breast it wears a broad band of a rufous slaty colour, which is one of its most distinguishing features. It is crested and has a white throat; the upper parts are slaty blue, the wings spotted and barred, with rather a long tail. These birds seem only to be seen in couples, each pair keeping to one particular part of the water. Its peculiar note is very much like a policeman's rattle. The belted kingfisher lives almost entirely on fish, swooping down almost into the water in its eagerness to secure a dainty morsel of food. The bird seems very easily deceived; if you throw a small stick or stone into the air, down it swoops, thinking, as I suppose, that it must be a fish—very much out of water.

The belted kingfisher does not seem to be at all timid, circling round one's head, and uttering its harsh note, as if we were

intruding into its domain. They seem to prefer salt-water hunting grounds to fresh-water, being much more frequently seen along the sea coast or mouths of rivers than on inland lakes. I have often watched one particular bird perched on some branch overhanging the water's edge, with its sharp beak pointed downwards on the *qui vive* for a fish. A bird will sit like this, quite motionless, for a long time, making an occasional downward dart, and then if not successful it will fly off to some other post of vantage to repeat the same thing again.

The most ubiquitous and the most mischievous of birds in British Columbia are the blue jay (*Garrulus cristatus*) and the American "robin" (*Turdus migratorius*), which is not a robin at all, but a species of thrush. The former is a very handsome bird, with brilliant blue plumage and a rich crest, which it invariably raises when it sees you are looking; it also is very fond of flaunting its tail and strutting up and down to show itself off. It feeds on berries, but chiefly on fruit such as cherries, strawberries and apples, &c. Its habits are very much the same as our familiar jay, which is its cousin. It measures about twelve inches in length and its note is "shee-wrk, shee-wrk." The blue jay seems very fond of the densest woods and is not often seen in open ground. It often perches on a tree in front of you, and then, when you come up to within a few yards of it, off it flies to another tree, not far off, uttering its shrill note. One day I followed a bird for quite a long while and the jay seemed to enjoy the fun immensely; perhaps rather more than I did, as the part of the bush through which it led me was by no means easy to get through.

The second of these two birds, the American "robin" so-called, is about the same size as our well-known thrush. The upper parts of the body are a dull blackish grey, as are the wings and tail; the breast and lower parts are of a cinereous brown. This bird is almost as mischievous as the blue jay, eating apples off trees and stealing cherries and other fruit. There seem to be an enormous number both of the blue jay and American "robin" in British Columbia, and, as may well be imagined, they are rather destructive to farmers. This being the case, it may seem rather incongruous to call them "friends." They certainly do a great deal of harm, but people are always apt to calculate and often over-estimate the evil done by such birds, rather than take any heed of the good done by the destruction of insects or seeds of noxious weeds. Does it not do more good to the farmer for a bird to eat some fruit and let it destroy the insect, which probably represents so many hundreds like itself? It is far better to lose some fruit and have the insects destroyed, than to allow them to go on increasing out of all proportion, and perhaps finally losing all the fruit, simply because the natural limitations are put a stop to by the ultimate extermination of the birds themselves. Then there is still another side to the question. Supposing, for the sake of argument, that any bird which is known to do some harm is exterminated, then the birds

of prey or other animals which probably kept that bird in check would have to find food elsewhere, beginning to prey on some other species of birds which are known to be beneficial to man. In this way the balance of nature, as it were, is upset, and so through the extermination of only one species perhaps everything, high or low, in the scale of animal life is alike made to suffer.

During the summer and early fall I saw several humming-birds. One morning I was in the garden, looking for butterflies, when just at my elbow I heard a buzzing, very much the same sound that a humming-bird hawk-moth makes, only louder. I looked round, and there within a few feet of me was a most exquisite little creature suspending itself in the air over a flower, with its wings moving so fast that they were almost invisible. Every few seconds it dipped its slender beak into the flower, and then was away in a flash, a bright speck glinting in the sunshine and out of sight in a few moments. There seemed to be one particular pair of birds that always came into the garden. One day, perhaps, only one would come, another day both would appear, but nearly always one or other came as long as the flowers were in bloom. They may have had a nest not far off and were attracted by the flowers, as they may feed on minute insects to be found there, or the nectar which is to be got from most sweet-smelling flowers. The particular species of humming-bird was, I think, *Stellula calliope*, which is found in California and extends further north than any other. It was not a *very* small bird, and its chief colour was a brilliant metallic green which shimmered like shot-silk.

Another bird of an entirely different group is the heron, which seems fairly plentiful in Western Canada. Inhabiting the mouths of rivers and creeks, the heron lives almost entirely on fish, and it is most expert in catching its prey. Its method of fishing is to stand on a stump, or to wade out into the water and wait for a fish to pass within measurable distance, when down it will pounce and pierce the unfortunate fish with its strong bill. So unerring is its aim that it rarely misses in its stroke. Its flight is rather peculiar, being very silent, yet clumsy-looking, with its long wings outspread and slowly beating the air, as it flaps along with its long legs stretched out behind it, and its head arched backwards. The young birds seem to have no crest, but the old birds have a series of long loose feathers, which are black, composing a kind of crest at the back of the head, but this is smaller in the female bird. The back and wings are of a blue-grey colour, and loose white feathers hang from the lower part of the neck. Some people like the taste of the heron, but I should think it is rather fishy. The note of the heron is not musical, being something between a croak and a groan; the sound is not unpleasant though, and seemed to me to add to the many other charming sounds of animal life in the glorious country beyond the "Rockies."

Basil W. Martin.

THE PIGEONS' SANCTUARY.

Beside St. Paul's, beneath the sheltering dome,
In that short hour that rest from toiling brings,
I heard the sighing as of angel wings,
And watched the gentle pigeons wheeling come.
Some cast them bread, heart-sick for country some
Dreamed, while the air was filled with happy things;
But ah! one note of piteous sorrow rings,
In those who wounded to the banquet come.

There, 'mid the cooing thousands, lo! a dove
With broken limb, torn feathers, bruised beak!
Methought I saw the cowards at their play,
Cursing the life they could not cast away.
"Thank God," I cried, "that all in pain who seek,
Can find around His altars rest and love."

H. D. Rawnsley.

AUTUMNAL DENMARK.

WHEN the flower sellers of London offer passers-by boughs of yellow beech leaves tied up in large bunches, the sight of them reminds one of a city where the beauty of autumn is not only represented in the street vendors' baskets. Autumn in Denmark—that is the sear and yellow leaf in its full glory, but autumn in London is not an ideal season. Those who are happy enough to be able to, are only too eager to shun it in October and November, for there is something very depressing about the fall of the leaf in the Metropolis. There is a faded air over everything, which acts in a reactionary way on those returning from delightful moorland or seaside holidays. There is the interminable London winter before us. London is rarely favoured with that bright autumnal weather, which is almost preferable to any other. We truly only have "samples" of it, as the American lady said. Umbrellas are the order of the day, greyness reigns supreme, and the sad-coloured leaves on the trees in our beautiful parks serve as a sad reminder of their past glory, and of the many months which must elapse before spring brings their successors. Copenhagen, on the other hand, is a town which shows to great advantage in the fall, for it is exceptionally well-endowed with

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* It has recently been pointed out that a number of the pigeons which dwell in the towers of St. Paul's Cathedral, and which present such a pleasing picture when being fed at midday, have but one leg each. This is attributed to pigeon shooting.

water and with trees, mostly beeches, whose leaves change to rippling gold in the autumn. These yellow beech-leaves are everywhere, and especially beautiful do they look reflected in the calm waters of the two lakes—Sorbidam and Pebling—which lie to the east of the city. They are massed, too, in all the glory of their *feuille-morte* colours as a back-ground to Lange Linie (the Long Line), the walk by the sea. There, in the autumn sunshine, lie hundreds of craft, amongst them most probably (signs of the annual Fredensborg gathering) the royal yacht "Osborne" and the Imperial Russian "Polarstjern," from which are borne the lively strains of a band. You linger awhile by the little lake of Grönningen, framed in those ubiquitous golden beeches, and the English church—St. Alban's—with its gracefully tapering spire. Then, as you proceed in your quest for autumnal beauty, you will leave the quaint but treeless harbour quarter and wend your way to the fruit and vegetable market. Here is a perfect riot of colour. The high grey walls of the surrounding houses are the fittest background for the queer-shaped baskets of rosy apples and juicy golden pears, heaped up and running over, purple plums and dusky damsons, cool melons, colossal pumpkins (which would put Cinderella's to shame), large white cabbages, which the Dane favoureth stuffed, and boughs of beech and spindle-tree, the latter thick strung with glowing scarlet, purple, orange-hearted berries. And the Amager women who preside over all these goodly things are most of them as fresh-looking as their wares. Small wonder in this, for these buxom saleswomen, with their checked kerchiefs tied over their poke bonnets, are descendants of sturdy Dutch settlers, who made their home on the adjacent flat little island of Amager nearly four centuries ago. When you can tear yourself away from this entrancing picture, the Boulevards must receive their meed of admiration, for the rows of evenly planted, autumn-tinted trees do much to enhance the beauty of the rich red walls of Rosenborg Castle. Autumn also lays her hand lovingly on the numerous parks and public gardens, where Nature is, on the whole, allowed to work her own sweet will, with the least possible restraint, and consequently the most delightful results. But the crowning glory of autumnal Denmark is to be found outside the city, and is reached with little trouble. The train takes you to Klampenborg in about twenty minutes, and then a few steps lead you into the Dyrchave (deer park), or fairyland in autumn, whichever you may choose to call it. It is idle to attempt to describe the dazzling beauty of those vast arcades of trees, glowing in a hundred hues from deep purple brown through shades of russet to rich amber and palest yellow streaked with green, whilst some in their wild desire to don their bravest attire ere winter come stand as if wrapped in scarlet and orange flames. The red deer roam in vast herds through the Dyrchave, which is broken at intervals by grassy glades or quiet tarns fringed with bullrushes. It is a veritable

Indian summer, the sky is a clear blue, and over all there rests that faint bluish haze of autumn, which lends an air of unreality to the scene, intensified by the stillness.

Dyrchave is not the only beautiful wood, although it is the most lovely of those in the vicinity of Copenhagen, and has, in fact, no rival. Charlottenlund (lund=wood) is only a quarter of an hour from the city by train, and the delightful woods round the lake of Furesö are at no prohibitive distance. Cylonons, too, is the park surrounding the Castle of Fredensborg, where the blue waters of Esrom Lake are framed in yellow beeches. The autumn lover will also find a pathetic beauty in a visit to Skodsborg, which is reached either by a humble omnibus or walking from Klampenborg. It is one of the favourite seaside resorts of Copenhageners, but by the beginning of October it is practically deserted, the country houses closed and empty (for they are generally furnished for the summer only), the hotels closed, and the solemn woods keeping guard over it till its resurrection in May. This is the same with all Danish holiday resorts. It is certainly more inspiriting to wander home through the woods, where the pungent smell of fallen leaves is heavy on the air; even then that bitter sweet feeling, "wild with all regret," which autumn engenders will not be wanting, though "the happy autumn fields," and the bright foliage in the city itself do much to soothe the longing for "the days that are no more."

Bella Sidney Woolf.

A HERALD OF SPRING.

As I walked 'neath the chestnut trees,
I heard a song, a sound of spring,
Borne on the welcome western wind
Right merrily did it outring,
Telling of sunny days in store
When winter's cold should be no more.

It was no thrush or blackbird lay
That brought the joy of spring to mind,
And made us dream of mirth and May,
And made us long May flowers to find;
Only a merry chaffinch note,
That on the western wind did float.

Not very loud or very long,
This first sweet carol of the spring,
Nor half so sweet as many a song
That round us soon will gladly ring;
But all the joy from May to June,
Lived in that little singer's tune.

I saw, where on a leafless tree
The happy bird did perch and sing,
The old song, sung eternally,
Went rippling o'er the woodland hill.
Oh! light of heart and bright of wing
The happy bird did trill and sing.

HELEN J. ORMEROD.

GILBERT WHITE.*

THIS pretty book will be welcomed by every lover of White's *Selborne*. Its main purpose is to give an accurate statement of the various editions of the book, which is set forth in three chapters of nearly a hundred pages, and a tabular summary, with notices of the reception of the book from its first issue in 1789, to 1895: this purpose has been amply fulfilled. Another excellent service done by Mr. Martin is the revision of the geology of Selborne, with the latest scientific accounts of the strata, *e.g.*, of the gault running north and south of Horsham, the nearest approach of the Hastings sands and of Haslemere, the nearest touch from Selborne of the Wealden clay.

One chapter deals with Gilbert White as a poet. No doubt he loved poetry as he loved music. He says, November 24, 1782:—"When I hear fine music I am haunted with passages therefrom night and day, and especially at first waking, which, by their importunity, give me more uneasiness than pleasure." He quotes, among many other poets, Cowper, and in 1788 Phillip's lines on foliage, "Emerald green encased in flaming gold," and the beautiful lines of his friend, Dr. James Hurdis—of Magdalene College, Oxford, Professor of Poetry, Rector of Bishopstone, Sussex—on the bells, which White applies to his childhood's bells of Alton. Hurdis was a Sussex man, whose school was at Chichester; and in all probability the "reverend Alcanor" in the "Village Curate"—a poem abounding in natural history gems, and especially full of bird life—was the friend's portrait of Gilbert White, curate of Selborne, of which living Magdalene College was, and still is, landlord and patron.

But White, as a poet, was a copyist; this is shown in his imitation of Virgil, *Georgic*, ii., 475—

> "Me vero primum dulces ante omnia Musæ,
> Quarum sacra fero ingenti percussus amore,
> Accipiant, cœlique vias et sidera monstrent,"

itself an imitation of Lucretius (*De Rerum Natura*) the first great nature poet, and father of "Natural History," B.C. 50. Compare with Virgil's lines those of White—

> "Me, far above the rest, Selbornian scenes,
> The pendent forest and the mountain greens,
> Strike with delight."

Again—

> "But if gusts rise, the rushing forests roar,
> Like the tide tumbling on the pebbly shore."

Cowper has exactly the same thought (*Task*, Book i.):—

> "Nor rural sights alone, but rural sounds
> Exhilarate the spirit and restore
> The tone of languid nature. Mighty winds

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* *Bibliography of Gilbert White*, by E. A. Martin, F.G.S. The Roxburghe Press, 1897. 8vo. pp. xiii., 274; price 3s. 6d.

That sweep the skirt of some far-spreading wood
Of ancient growth, make music not unlike
The dash of ocean on his winding shore,
And lull the spirit, while they fill the mind ;
Unnumbered branches waving in the blast
And all their leaves fast fluttering, all at once."

But this is an amplification of Virgil's sign of coming storm—"nemorum increbescere murmur" : *Georgic*, i., 359.

Mr. Martin ought to have no difficulty about the word "zig-zag." It looks like a Dutch introduction into English landscape-gardening, and quite akin to the many mazes and labyrinths that came into England at the early part of the 16th century. Probably "picnicers," page 205, is a misprint for "picnickers."

One blemish may be found in the book ; its tone is adulatory, and the late Lord Selborne used to say that no more humble man ever lived than "our great patriarch." On the other hand there is an odd sentence on page 27, partially explained in the context. "There are many passages in his book which are never quoted, since were they they would undoubtedly destroy the conception of the character which hitherto we have been led to associate with Gilbert White." Character for what ? If for morality, his life was as transparently good and true as that of Isaac Walton and George Herbert, of Sir Henry Wotton and Evelyn. The context seems to explain that the failure to be found in some of White's writing is a want of manliness, but his precision—for instance, marking the appearance of gnats and the boys playing cricket near the Plestor—is simply fun, though some readers are too obtuse and straight-laced to understand it.

At page 226 a passing mention is made of the copy of Hudson's *Flora Anglica* which was Gilbert White's own copy, in which he has written his name. This historical book, which is perfectly genuine, is in the writer's possession, and much valued as having belonged to the great naturalist who was a landlord of Harting land to his death, and who, as Bell says, lived at Harting till he was thirteen years old. This deserves more notice than Mr. Martin has bestowed upon it. Mr. Britten gave a full account of it in his *Journal of Botany* for 1893, and the abstract of this printed in NATURE NOTES for that year (pp. 210, 211) should have been referred to. In this White has marked 439 plants which he had observed at Selborne.

It is unfortunate that the pleasant book, containing, as it does, three beautiful illustrations—The Plestor (1813) ; the Church, with its noble yew, which an Oxford professor likened to "Abraham's tree at Mamre" ; and White's house (1813)—has no notice whatever of Gilbert White as from top to toe almost as much a Sussex man as one of the great Hampshires. His father and mother were married at Rogate Church, Sussex ; one brother was born at Harting ; and so on. Sussex will not like to be robbed of its birthright.

Still Mr. Martin must be thanked for having done excellent service. It is to be hoped that in future times his excellent idea may be repeated, and that every testimony to the great father of modern natural history may be brought together.

Harting. H. D. GORDON.

A Justifiable Complaint.—The Earl of Malmesbury has again given notice that, unless means can be devised for making visitors conform to his rules, his rhododendron woods at Heron Court, near Bournemouth, will this year be closed to the public, instead of being thrown open during the summer months as hitherto. Lord Malmesbury points out that his only rules are that smoking is prohibited on account of the danger of fire, and dogs are not allowed. In spite of every warning, however, he adds, visitors have set his servants at defiance, picked the rhododendrons, and lighted fires in the woods, which narrowly escaped total destruction. Having done all he could to make the woods pleasant to visitors, by keeping the walks in order, &c., and being debarred from using the woods for himself or family, in consequence of the crowd there during the summer season, he thinks it rather hard that the public should have taken no notice of his repeated caution.—*Standard*, Jan. 31.

SELBORNIANA.

Cast Feathers on Chinese Walls.—Our readers will be interested to learn that, in answer to a private letter from the Editor, Miss Edith Stock has forwarded specimens of the feathers referred to in her note (NATURE NOTES, 1896, p. 236), with a letter concerning them. The latter she desires to be considered as a private communication, and we of course respect her wish. The feathers have been submitted to Dr. Bowdler Sharpe, who says they are the breeding plume of one of the larger egrets, probably *Herodias intermedia* or *H. alba*. In connection with this matter, the following extract may be made from an interview with one of the managers of Vyse & Sons, reported in the *Westminster Gazette* of February 16.

"While on the subject of hats," writes our representative, "I thought I might improve the occasion by discovering whether the aigrette plume, which is said to involve great cruelty to obtain, was worn as much as ever. On the ground floor of the warehouse was a showroom of feathers and plumes. Near some magnificent ostrich feathers were apparently a collection of the aigrette plumes—

"'So, in spite of cruelty, fashion still insists on these feathers?' I asked. The manager of the department laughed.

"'Why, these plumes are taken from the bantam, and these others'—he held up a spray of apparently delicate heron plumes—'are from an ordinary fowl. How are they made? Well, that's a secret of the trade, but I can assure you that not more than one in a thousand of the so-called aigrette plumes are taken from the heron. And,' he added, 'it is a ridiculous fable that it involves cruelty to obtain the real heron's plume. And no one would shoot the bird at the breeding season, when its plumes are not at the best.'"

It is gratifying that public opinion should have so far influenced those who trade in aigrettes as to induce them to explain away or apologise for their practice. But we imagine our readers will agree with the *Star* in preferring to accept the verdict of Sir William Flower in a matter of this kind.

Tame Birds (p. 38).—I venture to beg that no one will give liberty to any bird who has been caged for some time. It is quite true what Mrs. Brightwen says about bird-boycotting. I am an old woman of 73 years, and have several times turned out birds, usually hens, in the spring, and always have found, or had reason to fear, that the poor things had been killed by their own relations within a few hours. Last year it is true that I turned out a brood of sparrows that I had found starving in a nest torn down by some boy, but I gave them their liberty first in a chickens' coop and then removed a bar so that they could go out and in, but even these most likely were killed. The only birds I ever turned out successfully was a brood of swallows: these were delightful little pets, and were, till the autumn, loose in a large empty room; they would take a fly or some of their food out of my fingers while flying. Late in the summer I opened the window wide and they came out and in for a week or two, but gradually cared less for artificial food, and, I have reason to believe, emigrated with their fellow swallows. I need hardly tell you these were also from a fallen nest, and I may safely say that all my bird pets were picked up and would have died if not rescued. A nightingale I had once who was delightfully tame, and after his bath would nestle in my warm hands to dry himself, but he met with a sad end. I had covered a cage of canaries with a red shawl to stop their singing, and when I let the nightingale out for his bath and a fly round the room, he suddenly caught sight of the shawl, and, in a panic, flew against the window and fell down dead.

I had a robin once, who had been caught in a trap and lost part of one leg, so I kept him. He sang delightfully, but if the window was open and he loose, he would fight another robin outside through the wire netting and get hurt. I have reared a cuckoo, and many other birds, but it would weary you if I wrote more of my pets. The food I have found which suited best all soft-billed birds, consists of equal parts of scraped raw meat or sheep's liver, and yolk of hard-boiled egg, but in summer this must be made fresh twice a day. Many or most will do with bread crumbs with which yolk of hard-boiled eggs is well mixed, finely bruised hemp seed, and some hard-boiled liver grated. All require every day two or

three meal-worms or wood-lice, or ants' eggs, but all these must be given sparingly; a little cress or lettuce very finely chopped, carrots, grated, should be mixed with their food occasionally. I quite agree with Mrs. Brightwen in thinking most birds require a dark corner in their cages.

Fordington, Dorchester. MARY A. HAYNE.

I hope Mrs. Brightwen will tell us the fate of her tame blackcap and nightingale during the summer, and also on what date they first begin to sing. It will be interesting to note whether they begin any earlier in a state of captivity.

F. R.

Wild Birds Protection Act.—Now we have had the advantage of its restrictions it would be interesting to hear whether any of your readers recognise any increase in the number of birds that have been scheduled, particularly those rarer species which were gradually becoming almost extinct.

A. C.

Richmond Park (p. 27).—The statement that Richmond Park is closed at sunset is rather misleading. The carriage gates are closed at sunset, but pedestrians may traverse the Park at any hour of the night.

G. H. WHYBROW.

Elephants in Africa.—The following translation from the *Independence Belge* of December 4, 1896, seems worthy of record in NATURE NOTES, for the letter in the *Times* referred to has probably escaped the notice of many besides myself. "The African elephant can take heart again: we speak of his preservation. A correspondent of the *Times* has just informed that journal that at his request and at the instance of the Bombay Government, a zone of protection for the animals with trunks (*bêtes à trompe*) has been established in the Somali country by the British authorities; it extends from the passage called Cheikh on the east, as far as the Abyssinian frontier on the west, and occupies a space of about 320 kilometres by 80; to hunt in this zone, it is necessary to be provided with a formal permit; further, a district of 60 kilometres square has been there marked out, which comprehends the Gadabursi mountains, and in which hunting is absolutely forbidden. Already the German East African authorities have established two 'sanctuaries' for their thick-skinned dependents. It is thought that these efforts and the decision taken by the English Government will have the effect of rapidly repopulating Eastern Africa with elephants."

GILES A. DAUBENY.

The London County Council Again.—The London County Council is again at work on Hampstead Heath, as the following letter, sent by Mr. Henry Holiday to the *Westminster Gazette*, will show. If the energy displayed in spoiling the Heath were devoted to the improvement of the wretchedly kept Embankment Gardens, the public would be gainers.

"VANDALISM AT HAMPSTEAD.

"We had hoped that vandalism was on the decline, but I fear there is plenty of it still rampant. We have not another Peterborough Cathedral on Hampstead Heath, but we have some beautiful willows, and the west front of these is being mutilated in the most barbarous fashion, so that the trees look like so many octopuses. Pollarding may possibly be occasionally necessary for the preservation of a tree, but these unhappy widows are allowed no rest; so soon as fresh branches have grown they are all ruthlessly destroyed, and even when they are clothed afresh, all the natural grace of the branches is gone for ever, and they look more like broom-heads than trees. Public complaint has been made on this subject, and I have not heard of any defence having been offered by the authorities for what appears to be an act of wanton destruction.

"HENRY HOLIDAY."

NATURAL HISTORY NOTES AND QUERIES.

Slow-worms in Winter.—On the morning of January 26 I was walking along our village lane; the day was bright and frosty, with brilliant sunshine. Suddenly, to my astonishment, I observed lying on the hard frost-bound road the severed body of a slow-worm. From all appearance it had crept out from the sunny bank, and was in the act of proceeding to cross the road way when a passing cart wheel severed its body. It was evident that it was only quite recently killed, as the blood from its crushed body had stained the snow which slightly covered the ground. A gentleman, also resident here, found another in the same plight, quite lately killed, the wounds being fresh and the portions severed supple. The day was one of the coldest that we have experienced this winter, the thermometer never exceeding 28° in the shade the whole of the day. When we consider how early the slow-worm retires into its winter quarters (generally by August) it is somewhat strange that it should have chosen to crawl abroad on so bitter a day in mid-winter. It may be the brilliant sunshine on the day in question, after so many months of almost (comparatively speaking) entire absence of it, made the slow-worms think that spring had really arrived.

Bath. N. S. H. S.

The Rook.—Does the rook pair for life? Many of these birds sit in pairs all the year round, close to, and even touching one another, and when lately we had deep snow on the ground, they "cuddled" close together in that. Now and then I have seen a couple go through a curious pantomime of feeding and being fed, "hob-nobbing" with the points of their long beaks, though there was nothing in them. I suppose this must be a pair rehearsing the family duties which they will have to discharge when the next breeding season comes round.

Folkestone. A. S. Hussey.

Magpies in Regent's Park.—I have, at various times, observed magpies in Regent's Park. Some time ago I used to see a pair, but one having apparently disappeared, I was afraid it had come to grief. Yesterday (February 10), however, I was delighted to see two, if not three, flying, remarkably silently for them, among the trees in the broad walk, near the fountain. They are usually to be observed not far from the "Zoo," but whether they belong to the keepers or are wild birds I have never discovered.

W. Hawker Smith

RULES FOR CONTRIBUTORS AND CORRESPONDENTS.

1. All communications for Nature Notes must be authenticated with name and address, not necessarily for publication.

2. The return of unaccepted contributions cannot be guaranteed. We cannot undertake to name specimens privately, or to return them.

3. All communications for any number must be in the Editor's hands by the 15th of the preceding month.

4. Communications for Nature Notes should be addressed to the Editor, James Britten, F.L.S., 126, Kennington Park Road, London, S.E., as should specimens for naming, books for review, &c. The Editor cannot undertake to reply privately to questions.

5. Letters connected with the Selborne Society, as well as all inquiries as to the supply of Nature Notes, and subscriptions, should be addressed to the Secretary of the Selborne Society, A. J. Western, Esq., 20, Hanover Square, W.

6. The Editor is not responsible for the contents of the last page of each number: communications respecting that page must be addressed to Mr. Western, as above.

SELBORNE SOCIETY NOTICES.

Annual Meeting and Conversazione.—This will take place early in May, the date of which will be announced next month. Members who are willing to lend objects of interest for exhibition on the occasion are requested to communicate at an early date with the Hon. Sec. of the Conversazione Committee.

Winter Lectures.—A further lecture was delivered by Mr. F. W. Ashley, F.Z.S., at a meeting of the Highgate Hill Christian Social Institute, on February 4, on the subject of "Birds and their Nests." The opportunity was taken to point out the work which the Selborne Society was endeavouring to perform in encouraging the study and love of birds.

Council and Committee Meetings.—In future, these meetings will be held on the first and third *Tuesdays* in each month. The next meetings of the Council will be held on March 2 and April 6 at 5.30; of the Magazine and Leaflet Committee, on March 16 and April 20 at 5.30; and of the Field Club Committee, on March 2, after the Council Meeting.

ANNUAL PAYMENTS FOR 1896.

	Magazines. £ s. d.	*Branch Contributions.* £ s. d.
Atalanta	2 1 1	0 5 0
Barmouth	2 15 4	...
Bath	4 13 4	...
Birmingham	9 15 10	3 6 9
Brighton	3 5 0	1 14 0
Haslemere	4 17 0	...
"Markwick"	1 0 0	...
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Northern Heights	11 9 8	2 6 6
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Petersfield	2 0 6	...
"Rape of Lewes"	4 9 8	0 12 8
"Richard Jefferies"	3 10 0	0 11 0
Sutton (2 years)	6 15 0	...
Weald of Kent	2 1 2	...
	£65 15 1	£9 5 11

NEWS FROM THE BRANCHES.

Birmingham.—The Annual Meeting was held on January 26, under the presidency of the Rev. A. R. Vardy. The Annual Report was presented by the Hon. Treasurer, Mrs. C. Dixon, and showed a balance carried forward of £8 14s. 8d., the expenditure for the year 1896 having been £40 12s. 2d. Numerous essays were received from various schools in the neighbourhood in competition for prizes given by the Society, and this class of work would be extended during the coming year. In moving the adoption of the report, the Chairman maintained that the great principles of the Society were violated through ignorance and thoughtlessness rather than an intention to do harm. Mrs. Sturge seconded. The Lord Mayor was elected President for the ensuing year; Messrs. Priestley Smith and A. W. Wills, Vice-Presidents; Mrs. C. Dixon, Hon. Treasurer; and Miss D. C. Sturge, Hon. Secretary.

Clapton (Lower Lea Valley).—On February 6, Mr. C. Nicholson, F.E.S., gave a most instructive lecture on "Stars, Star Clusters and Nebulæ," illustrated by drawings and diagrams, which proved very interesting to a large attendance of members and friends. On March 6 the General Business Meeting for the election of officers for the ensuing year (1897-8) will be held at Upland College, Benthall Road, N., at 7.30 p.m. The usual monthly meeting will follow, commencing at 8 p.m.

EDWARD A. MARTIN, F.G.S.,
Hon. Sec. Magazine and Leaflet Committee.

Nature Notes:
The Selborne Society's Magazine.

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THE NEW FOREST IN SPRINGTIME.

IT is a sunny afternoon, in the middle of March. All night long the wind howled and moaned through the woods and across the bogs, driving the pelting rain before it in sheets. But at sunrise the rain slackened, then ceased altogether. The wind, though still strong, is no longer violent: it careers joyously over the face of the land now, intent on drying up the pools and sloppy places caused by last night's storm, instead of hurling itself with deadly energy against every obstacle in its path.

Nevertheless, the roads are still spongy, and give out a soft, pleasant, crunching noise under the horses' hoofs, as the great Romsey beer-waggons lumber by on their weekly journey. Those thin, straggling, picturesque Scotch firs at the side of the road are tossing their branches as though from very joy of life against the bright, pale blue, rain-washed sky. Down their lean and rugged stems are long streaks of black, where the rain, which beat so furiously against them, has not yet wholly dried up. At their feet cluster some sturdy old gorse-bushes, cropped by many generations of Forest ponies and cows into dense, unyielding masses of green, like gigantic prickly cabbages. Another week, and these veterans will be one mass of gold; at present they are thickly set with greyish yellow buds.

Here and there the road-side turf is just beginning to take on a tint of brighter green, in place of the faded dun colour it has worn all the winter through. Two more days of this sunshine and east wind, and this same road will have dried and faded till it looks like a white ribbon, winding up the hill and across the moor, and whirlwinds of fine grit and dust will career along it. Down in the bog, under the shelter of that low, tussock-covered

hill, the plovers are crying. One of them is even now sweeping round it, describing the most beautiful curves imaginable, and uttering the while his keen, clear, unutterably melancholy cry. His mate is close at hand, either sitting on her spotted eggs or looking after the newly-hatched little ones. Probably she is sitting close to the earth, on the moist bog-soil, partly hidden amongst the coarse herbage, and entirely harmonising in colour with the grey stones, dark earth, and shades of grey and yellow which the bog vegetation assumes at the close of winter.

To find a plover's nest is a sufficiently difficult task to any but the forester, born and bred; but it is simplicity itself when compared with the undertaking of discovering the young birds, whose power of hiding, within a few hours of being hatched, appears little short of miraculous to those unacquainted with the ways of wild things. In this they are largely aided by the old birds, who do everything in their power to create a diversion in favour of the young ones.

You are walking quietly across the heather, towards the bog, stepping cautiously, as you approach its margin, from one tuft of rushes and grass to the other, to avoid sinking ankle deep in the soft, black, peat mud, which stains indelibly brown all it touches. Suddenly a sharp, mournful, whistling cry, just over head, makes you glance up, at the imminent risk of collapsing into the swamp. A large green plover, apparently wounded in the wing, is hovering near you, flying with difficulty, and evidently in pain—for frequently it sinks to the earth, then with an effort rises again and flutters a little further, always in a circle, ever receding, ever near the ground, on to which it is clear that ere long it must sink for the last time. So close does the bird come that it seems as though one step nearer must enable you to grasp it; as a matter of fact, that one step nearer probably lands you nearly up to your knees in bog-water and evil-smelling slime, whilst the bird, suddenly recovering complete use of its seemingly injured wing, silently disappears.

The whole scene was a piece of consummate acting on the part of the bird, which had a nest, if not young ones, close at hand, and was trying by every ruse in its power to lead you away from the little patch of earth inhabited by its family. Hence the reason of those ever-receding circles in which it flew, and the counterfeiting of that crippled wing, the bird hoping, by those means, to rivet your attention upon itself till the little ones should have reached a place of safety. If you are an old hand you do not attempt to follow the parent bird, knowing that each step is taking you further from what you seek. You either go in the direction exactly opposite to that chosen by the old bird, or you stop short, carefully scanning every inch of ground around you. The excitement of the old bird then becomes intense; it will sweep down so close to you as almost to brush against your clothes, screaming loudly the while, and continue so doing till either you have moved, or the young ones found shelter.

At the latter end of March, or beginning of April, the blackthorn bushes make a grand display here and there; the long purple black branches, clothed with milk-white blossoms, showing up well in thickets of tangled oak, dogwood, and honeysuckle. In these sheltered spots the grass grows sweet and thick, and the forest ponies and their foals come here for the sake of the feed, and of protection against the bitter east winds.

Here and there, deep among the old beech and oak woods, beside a grassy "lawn" or on the bare open moor, you come across a keeper's lodge, clean, snug, and comfortable-looking, with its well-kept flower-garden in front, and plot of vegetable ground, and slip of grass-grown orchard behind. Those forest orchards, how beautiful they are! consisting, it may be, of a dozen trees—old, mossy, and twisted into every imaginable shape—with the bright green grass below them, through which the sweet-scented double daffodils are even now thrusting their sturdy, sword-like leaves and bowed green and golden heads.

Along that sunny, mossy bank, the white violets cluster closely, whilst beneath them in the ditch, where later the bluebells bloom, struggles the tiny, blue-flowered periwinkle, amidst an occasional clump of the beautiful butter-and-egg narcissus. Another very favourite flower in these old-world gardens is the double lilac primrose, sometimes, though rarely, accompanied by the beautiful snow-white variety.

But the spring day is drawing to a close, the fowls have had their evening meal and retired to roost among the rafters of the rough heather-thatched stable; the cows and pony are waiting patiently by the door for their food; the old black pig is routing busily in the thin turf and grunting loudly; and the lurcher is walking to and fro, to the extent of his chain, uttering a short bark now and again.

In the sky the daylight slowly dies, leaving bars of gold and pale green, against which the black outlines of the pines stand out in sharp contrast. Very soon all colour has passed away, the animals are at rest for the night, and no sound breaks the silence of the forest except the rustle of the wood pigeon's wings, as he settles down to roost in the fir trees on his return from foraging in the neighbouring fields.

C. M. DUPPA.

A Mole's Larder?—Among the mole-catching fraternity in these parts there is a belief that moles lay by a stock of food against times of scarcity. The plan is supposed to be this. A quantity of wretched worms are collected in a chamber. To prevent their escape the head of each worm is bitten, and thus all power of getting out of captivity is taken away as long as the wound remains unhealed. The larder is said to be constantly overhauled, and a fresh bite inflicted on the poor worm to keep up the raw. By this simple means of torture the mole is supposed to keep his larder going. Such is the local opinion more or less prevalent. Have any of the readers of NATURE NOTES ever heard of a like habit? It is contrary to what one has always read, and I do not think authority can be quoted in its favour.

Thetford. EDMUND THOS. DAUBENY.

A LAST LOOK.

I HAVE come out here to take a last look at some of my winter bird friends before they fly northward; and standing by the gate I can see their light mottled breasts conspicuously marked against the dark twigs of the hawthorn on which they have settled. A glance through the glasses show that only fieldfares are there, some feeding on the berries which have survived the winter, some preening their feathers with their yellow bill. They have come well through the winter, frosts having been short and slight notwithstanding the prophecies founded on the abundance of berries in the autumn. Rarely has the earth been too hard to prevent the foraging for worms and burrowing insects of which they are so fond. They are pretty birds, easily mistaken at a distance for their relative the missel-thrush, though at this time of the year the "stormcock" is generally too intent on housekeeping duties to be seen roving about the fields with its more northerly nesting friends. For the missel-thrush is an early builder, and will be sitting perhaps before the fieldfare starts for the bleak tundra of Siberia, or to the long days of the Arctic regions where it has its summer home.

A cart rumbling along the lane below disturbs them, and with a chorus of harsh, chattering cries they fly oft across the next field and out of sight. As they pass me I see again that the flock contains none but fieldfares—no redwings—at which I am disappointed, for I love to watch these pretty little members of the thrush family running spasmodically to and fro in search of food, moving their heads shyly upwards as they stop to listen, and flying off at the slightest suspicion of danger. Perhaps they have already gone north, and will be seen here no more till the trees which have not yet begun to bud have passed through several shades of green to yellow. It is said the redwing has a pretty song, but it is never heard in this country, and as it nests principally where human life is scarce, little is known of its singing powers. But why should it go to the far north to build its nest? It lives on the same fare as our resident thrushes, and they find food in plenty. Building sites and materials are as convenient here as in the bleak inhospitable north, yet like many other birds, the redwing prefers high latitudes, and though a few may linger in the northern parts of our island, they are but stragglers, and rarely, if ever, nest there. They seem to retreat before the returning warmth of spring, and before the primroses have begun to fade they, with most of our winter friends, will have passed to the north and east, making way for the more numerous summer visitors.

Our little island is most fortunately placed with regard to bird life. It is within the southern limit of many circumpolar species, and is the breeding area of many birds which may fairly

be considered tropical, whilst many species use it as a resting-place on their journeys north and south in spring and autumn. To these may be added many who come here only occasionally, such as the spoonbill, bittern, avocet, and others even more rarely. Doubtless some of these rare visitors would stay and rest with us if unmolested, but unfortunately there exist persons whose minds can conceive no better purpose for a bird than to be shot at, and accordingly as soon as a rare one is noticed it is killed. It is difficult to know how to treat such wanton destroyers of bird life. Argument cannot sink low enough to reach them, and they are impervious to all humanitarian appeals. Yet much good might be done by our land-owners and game preservers. If a small fraction of the money spent on rearing pheasants and grouse was spent in protecting and encouraging some of these rarer birds our avi-fauna would soon be greatly enriched, and I can conceive it possible for as much pleasure and credit to be gained from the nesting on an estate of the golden oriole or hoopoe as from the slaughter of so many hundred head of game.

A faint "chiff-chiff" reaches my ear, and I turn quickly to catch a glimpse of a little greenish hued bird as it disappears in the hedge by the wood. A glance is sufficient for me to recognize a chiff-chaff, and I know that one of the earliest of our summer visitors has arrived.

How feeble seem to be its powers of flight, and yet those little rounded wings which now seem hardly able to carry it from tree to tree, have brought it safely across wide tracts of land and sea. Redwing and fieldfare may have gone, but their places will soon be filled by wheatear, redstart and nightingale; and standing here with the rush of the wings of the departing fieldfares still lingering in my ears, I can in fancy see the countless numbers of birds on their way to fill our woods and hedgerows with melody and life. From the Cape may come the martin, from the plains of India the swallow, from the great lakes and forests of Africa the swift, the cuckoo and the nightjar, whilst from nearer home will come the blackcap and other warblers. Can we picture what our country would be in spring and summer without these birds? A voiceless hedgerow, a silent thicket, a lonely wood relieved by no wren's songs, brightened by no flash of yellow wings. Why the sky would seem less bright, the buttercups less golden, the trees leafing to no purpose, and in the solemn hush of twilight, listening in vain for the melody of the nightingale, we should almost welcome the curtains of night to shut out from us a birdless day.

FRED. W. ASHLEY.

NATURE-POETRY.

(*Continued from page* 33.)

QUITE a modern type of poetry is that used by Burns when he apostrophized the mouse and the daisy that had been turned out by his ploughshare; and the same has been displayed in our day by Christina Rossetti and Jean Ingelow, and perhaps best of all by the Dorsetshire poet Barnes, who presents us with many such examples of it as this :—

> "A yellow-banded bee did come, and softly pitch with buzzing hum
> Upon a bean, and there did sip, upon a swaying blossom's lip;
> And there he mused, "Ay, I can see the blossoms all are sent for me."

These modern forms of Nature-poetry were inaugurated in the eighteenth century by two writers, one in poetry and the other in prose. The prose writer was Gilbert White, who may be looked upon as the founder of the school of poet-naturalists to whom, as has been shown, we owe so much. After a good education in the University of Oxford, Gilbert White settled for the rest of a delightfully quiet life at the pleasant village of Selborne in Hampshire, where he published, in 1789, four years before he died, at the ripe age of seventy-three, the book that created the literature of the fields. This charming book, which consists of one hundred letters sent by White from his pleasant village to some eminent literary friends in London, has made the name of Selborne known to the whole of the English-speaking races, and has recalled them to that return to Nature which had been elsewhere proclaimed by Rousseau, and in which they have themselves ever since taken the lead. Though Gilbert White was a prose writer mainly, yet he wrote in a truly beautiful style; so that, if read aright, his volume well deserves to be enshrined in the library of every nature-lover along with the Idylls of Theocritus and the Georgics of Virgil. Now and then he deviates into downright verse, and very pretty verses he writes. In the *Naturalist's Evening Walk*, amid delightfully pastoral sentiments, we find the following lines on the instinct that prompts the arrival and departure of the summer migrants :—

> "Amusive birds! say where your hid retreat
> When the frost rages and the tempests beat;
> Whence your return by such nice instinct led,
> When spring, soft season, lifts her blooming head?
> Such baffled searches mock man's prying pride,
> The God of nature is your secret guide!"

To the very end of his quiet life he was perplexed about problems of migration and hybernation, and to solve these problems he repeatedly excavated the caves of the bank-martin, and examined places likely to afford concealment to swallows, contending from various data that he had collected, that of two

whole species of British hirundines many individuals never leave this island, but remain in a benumbed state throughout the winter months. His correspondent Daines Barrington held a similar opinion, and believed that the martins concealed themselves amid rocky fissures, and the swallows buried themselves under water below the frost line. These were the views that had been held a century before by Walton, one of the very earliest idyllists of the country, and it was not till quite recent times that the details about migration had been completely made out.

Whoever reads the letters of Gilbert White cannot fail to be impressed by his attentive consideration of almost everything that belongs to out-door life. Anticipating Darwin, he has devoted a letter to earth-worms, wherein he refers to them as the great promoters of vegetation, and says that a good monograph on the subject would open a large and new field of natural history. Our author's *Naturalist's Calendar* reads like a complete eclogue of the seasons. From it we learn when robin, skylark, missel-thrush, greenfinch, nightingale, and the rest of the winged minstrels begin their harmony; when wych-elm flowers and death-watch beats; when the raven builds and the ivy sheds its leaves; when frogs pipe and trout begin to rise; when wood-spurge and yellow pimpernel unfold their blossoms, and the foxglove uplifts its purple spire; when the tortoise retires to his hibernaculum, and martins and swallows congregate; when swifts plume their southward flight and greenfinches flock, and the last swallow flits over the crimsoning hill. Having ascertained, by his own pitch-pipe, that owls hooted in B flat, and been afterwards informed by a musical friend that they hooted sometimes in F sharp, sometimes in A flat, and at others in B flat, he tried to find out whether these different notes proceeded from three different species or only from various individuals. There is hardly a single object of country-life, from echoes to owls' notes, or a single mode in which each may be viewed, that has not been noticed by this wonderful observer. Of such a bucolic idyllist it is truly lamentable that we have no portrait or outward presentment whatever; his personality is entirely sunk in his work; thus what we can conceive of him is left altogether to our imagination. For forty years he carried on his minute observations in a region which, owing to the abrupt and uneven nature of the land, and its numerous woods and hills, was especially frequented by birds. There, amid the springing curves of chalk hills and the flickering shade of beechen groves, he had at hand sheep-walks, downs, bogs, heaths, lanes, woodlands and champaign-fields; and in such exquisite scenery he lived a bachelor, quite alone, in an out-of-the-world village which was then difficult of access, and is not much better even in our day, Selborne being still quite off the railway, and not even yet disfigured by a railway station. There he meditated a book that deserves to be classed among country idylls, if only for its character in fostering a closer

acquaintance with outward Nature and paving the way to the further researches of Kingsley, Thoreau, Jefferies, Burroughs, and the rest that have hailed the sun upon the upland lawn.

Thus Gilbert White's *Natural History of Selborne* may be truly styled a great work, which completely inaugurated the literature of the fields, whose effects are more and more felt every day.

The other writer was a poet whose name is associated with a more delightful spot still, for he spent the greater part of his life in Richmond-on-Thames, where he established his fame, and gathered round him his literary friends, and where he lies buried. This poet was James Thomson, to whom are due the cited lines on "All-pervading Nature," which led to much of that poetry of modern times to which attention has been called. Of a poet who inaugurated such a movement as this, the fullest information should be cherished by every true lover of Nature.

Thomson's life was passed in two of the most poetic spots that ever could have been desired by any poet. His early life was passed in the South of Roxburgh, a shire remarkable for the unevenness of its surface, where an unexpected depression of large area bears the appropriate name of Southdean, locally pronounced Soudan. This depression lies at the foot of the Cheviots, five miles from Carter Fell, and it is enlivened, and was probably created, by the river Jed, which, increased by the tribute of many torrents, sweeps on past red banks overhung by adventurous verdure to its union with silver Teviot, the noblest affluent of the Tweed. From the centre of this "dene" or hollow (for such the word denotes) the open view all round gives a sense of freedom such as the narrow, winding vales of Roxburgh deny; at the same time there is the charming accompaniment of a feeling of restful seclusion, as of a prying and clamourous world shut out behind and below the horizon of distant mountains. Here are neither mines nor manufactures, towns nor trade; while the nearest railways, at Hawick on the west and Jedburgh on the north, are some eight or ten miles off, and not likely soon to come nearer. It is a happy valley, still retaining, at the close of the nineteenth century, uncontaminated by art, undisturbed by avarice, the peace and purity of its primitive pastoralism.

Previous to its possession by shepherds, this district had formed part of the great forest of Jedwood, had been the haunt of boars and wolves, and had afforded a sylvan home of refuge to runaways and outlaws; while its solitudes of glade and greenwood had, from time to time, been alarmed by hounds and hunting-horns, or the sterner cries of Border warfare, when often the hunt was merely a prelude to the battle. Here was Chevy Chase, and here the Douglas was wont to exercise his limbs and replenish his larder, to the envy of Percy, his English neighbour and rival. From *coveting* Percy took to *claiming* a share in the pleasures and treasures of the chase; and he bravely vowed, according to the old ballad, that he would hunt in the mountains of Cheviot within three days, in spite of all the oppo-

sition that could be offered by Douglas and his men. Douglas swore that he would "let" or mar that hunting; and the place where, five hundred years ago, the Scottish Earl mustered his men in defence of his exclusive rights to the chase, and in redemption of his oath, is, strange to say, identified with the Churchyard of Southdean. With the Union came peaceful times; the hollow was gradually cleared of its beeches and oaks and more prevailing pines; rural industry settled among farms and bleating folds, where of old there had passed by the hasty steps of the forayer and the hunter; and the true golden age thus inaugurated may be said to tarry in the Southdean still.

A more likely region in respect of natural beauty for the creation of a poet of Nature it would not be easy to find. To this happy valley among the uplands of the South of Scotland there was brought by his father, on November 6, 1700, an infant just two months old, who was destined to become the Poet of Nature and the harbinger of the modern style. They came from Ednam, a parish in the north of the shire, where the poet was born and where his father had passed eight years of his professional life as minister of the parish. It has been remarked by a careful observer that the scenery around Southdean bears in Summer a striking resemblance to the scenery around Virgil's birthplace of Andes, near Mantua. The remark is interesting; and we can well believe that the spirit that pervades the "Georgics" and the kindred spirit that animates the Seasons derived their bent and bias, their inspiration and aspiration, from early and close acquaintance with scenery similar in beauty, variety, and the charm of pastoral repose.

The interest that would fain trace a connection between Mantua and Southdean is increased when we consider that Virgil was probably the first poet to engage the attention of young Thomson; that, while a student on holiday in the long vacations, a copy of Virgil's poems was his companion in angling excursions on the Jed; and that when, later in life, Thomson was travelling in Italy, the fields where the bard of Mantua "gathered his immortal honey" were a principal object of his quest. With Thomson, all his life long, Virgil was always first favourite, whom his imitator was always willing to take for the god of poetry. Students of Thomson will allow that, to the qualities which he so much admired in the poetry of Virgil, we owe a large part of the charms of his own verse.

Amidst such scenes, fit nurse for a youthful poet, Thomson spent the early and most impressionable years of his life. His years of fruition, when he was finally moulding his poems and issuing them in the form we now have them, were passed in Richmond, a district lovelier and more poetic than even his native region. Thus, with a few years between, our Nature-poet spent the two extremes of his life under influences the very best and happiest that ever poet could desire. Both sets of influences, the earliest and the latest, are reflected in Thomson's

poetry, and both are well worthy of our attention. It was in his native Jed, that ran past his father's garden, or in some other affluent of Teviot or Tweed, that the poet had seen the mountain spate, that sudden and disastrous flood caused by heavy rainfall, which he sketches in these wonderfully vigorous lines, which are so graphic as to be instantly suggestive of the whole scene:—

"Wide o'er the brim, with many a torrent swelled,
And the mixed ruin of its banks o'erspread,
At last the roused up river pours along
Resistless, roaring: dreadful down it comes
From the rude mountain and the mossy wild,
Tumbling through rocks abrupt, and sounding far;
Then o'er the sanded valley floating spreads,
Calm, sluggish, silent; till, again constrained,
Between two meeting hills it bursts away,
Where rocks and woods o'erhang the turbid streams:
There, gathering triple force, rapid and deep,
It boils, and wheels, and foams, and thunders through."

These graphic lines of pure description of one of Nature's scenes are from "Winter," the earliest written of "The Seasons," which was planned and begun at Barnet, when Thomson was on his way to Richmond. With these we may well compare the opening lines of "Spring," written when the Poet had arrived and settled in Richmond:—

"Come, gentle Spring, ethereal mildness, come;
And from the bosom of yon dropping cloud,
While music wakes around, veiled in a shower
Of shadowing roses, on our plains descend."

It is worth while to dwell for a moment on the beautiful imaginative character of these lines, where the poet blends figure and feeling, which, though evasively bewildering to the imagination, admirably suggests a sense of the presence of spring. Instead of saying, in a prosaic way, that he means to describe the mild winds and refreshing rains, the flowers and song-birds, and other features of the spring-season, he imagines a goddess descending from heaven in response to his call, garlanded with roses and surrounded with music. The image of the goddess is purposely obscured with the cloud and the veil, to harmonise with the shy graces of early springtime. It was in suchwise that Nature was pictured by Thomson, who loved her for her own sake,—true inaugurator, as he was, of the modern school of Nature-delineation.

When Thomson came to London, the school of Pope was paramount; but "Winter" was written before the poet had felt the influence of the classical school of poetry. When, however, "Autumn" was produced, he had been five years in the neighbourhood of Richmond, where he had lived all the time in a literary atmosphere, and had become intimate with Pope, who had grown warmly attached to him; thus in that poem the influence of Pope is clearly shown; and his aid and influence were

altogether for our poet's good. Thomson had vigour enough and to spare; but he sadly lacked taste, and was deficient in repose. By association with Pope and his disciples, Thomson's taste was much modified; his feelings were toned down a little, and his language and expression were largely improved. These influences we feel as soon as we come to the third of "The Seasons" in order of composition, "Spring," from which the lovely invocation has been cited.

This improvement went on most in the beneficial air and society of Richmond, where Pope and Thomson were near neighbours; and it was chiefly shown in "Autumn," the last written of "The Seasons," which was not produced till its completion was made the occasion of a collected edition of the whole series. The following closing lines, which have been before referred to, are well worthy of attention, as showing the poet's life-long love of Nature, and containing reminiscences of the famous close of the second "Georgic" of his master, Virgil:—

"O Nature all-sufficient! over all!
Enrich me with the knowledge of thy works.
Snatch me to heaven,—thy rolling wonders there,
World beyond world, in infinite extent
Profusely scattered o'er the blue immense,
Shew me: their periods, motions, and their laws
Give me to scan. Through the disclosing deep
Light to my blind way,—the mineral strata there,
Thrust blooming thence the vegetable world,
O'er that the rising system, more complex,
Of animals, and higher still, the mind,
The varied scheme of quick-compounded thought,
And where the mixing passions endless shift,
These ever open to my ravished eye,—
A search the flight of time can ne'er exhaust.
But if to that unequal, if the blood,
In sluggish streams about my heart, forbid
That best ambition, under closing shades
Inglorious lay me by the lowly brook,
And whisper to my dreams. From thee begin,
Dwell all on thee, with thee conclude my song,
And let me never, never stray from thee!"

We can well admit that a poem which closes with such strains as these was well worthy to inaugurate the new school of those who painted Nature for her own sake. The poem indeed came out at an appropriate time. It was while Pope, with his exquisite rapier-thrusts, was putting to death the swarming hosts of Dunces, that there appeared the poem that put an end to the reign of his own classical verse, and heralded the dawn of what may be called the Romantic school of English poetry. Of this new school Thomson now became the recognised chief; and to him we owe the re-introduction of that poetry of Nature which, through Cowper, Burns, Wordsworth, Keats, Shelley, Tennyson, and other poets, has gone on gathering force from that time down to our own.

W. J. C. Miller.

(*To be concluded.*)

THE FLOWERING ALMOND.

[We have not yet had an opportunity of noticing Mrs. Fuller Maitland's second book,* which requires more space for its discussion than has been at our disposal. The following seasonable lines may, however, be taken as a sample of the many charming verses to be found within its covers.—Ed., *N.N.*]

YEAR after year, when Winter has gone by,
And London's smoke eclipses March's sky,
Spangling with rosy bloom the dusky air,
Its slender branches flowery burdens bear.
And none, methinks, did ever show more fair
In Eastern gardens, or home pastures where
Thrush's soft trill and linnet's silvery note
Down golden alleys of warm sunlight float
From orchard choirs, hung o'er with ruddy snow
To listeners, pillowed on green turf below.

Ah, lovely flowers! Right well ye testify
That 'twixt our sordid earth, our murky sky,
If man so will,
Things pure and fair and sweet may blossom still.

RED DEER.†

THE wild red deer possesses a peculiar interest in the eyes of British naturalists, from the fact that it is the largest truly wild animal left to us, and the remnant of the big game that our ancestors hunted for food. It is, as one of the authors remarks, "closely interwoven with our national life," and the hunting thereof developed the best qualities of physical excellence. The stags of prehistoric Britain, as shown by the antlers, found in peat bogs, gravel beds and sands, carried much finer "heads" than their modern descendants; but even now the red deer is a vastly nobler beast than the fallow deer more commonly seen in parks. Formerly the red deer roamed from the north to the south of Britain, but its area has been sadly circumscribed. Only, comparatively speaking, of recent years has it disappeared from some of its former haunts. Fifty years ago there were wild red deer in Oxfordshire, which occasionally afforded a run to the Heythrop hounds, in whose country Wychwood Forest lies. Nowadays, apart from the Scottish Highlands and some parts of Ireland, it is only in the Exmoor district of Devon and Somerset (together with two outlying districts, viz., the Quantock Hills and the Stoodleigh country), Martindale Fell in Westmoreland, and the New Forest, where a few head linger, that we find the wild red deer. The deer of some of these districts have been ably treated of by earlier writers, and Mr. Macpherson, in sketching the life habits of stag and hind, has done wisely in dwelling chiefly upon the forest of Martindale, for "no one

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* *The Saltonstall Gazette*, by Ella Fuller Maitland. Chapman & Hall, Ltd. Price 7s. 6d.

† "Fur and Feather Series." *Red Deer*. Natural History, by the Rev. H. A. Macpherson; Deer-Stalking, by Cameron of Lochiel; Stag-Hunting, by Viscount Ebrington; Cookery, by Alexander Innes Shand. Pp. viii., 320, and 8 plates. London: Longmans, 1896. Price 5s.

except the writer himself has attempted to depict the life of the stag upon the face of the mist-wrapped hills of the English Lake District." The life-habits, breeding, and development of antlers of deer are all treated of, and the reader is introduced, in an interesting description, to the picturesque region referred to. A good deal of antiquarian lore anent customs and services relating to deer, and famous hunts and hunters, as well as gossip gleaned from old people who could recall the ways and doings of "t'auld Squire Hasell," makes this portion of the volume pleasant reading. In the chapter entitled Echoes of the Chase, the ancient ways of hunting and taking deer are described, as well as the curious plan of cooking venison by baking it in pits lined with heated stones; and there is a good deal about deer stealing and poaching, for the "good Scotch folk seem to have always had a hankering after English venison."

The author of "Deer Stalking" holds that this is the "king of wild sports," but though no one can fail to glean something of the natural history of the red deer by reading the chapters on Deer Forest, and Stalking, it is hardly the province of NATURE NOTES to deal fully with this portion of the volume. The red deer has, it seems, so strong a smell that, especially at the end of the season, their presence can be detected by the unaided and limited sense of smell possessed by the owner of the dog. We have ourselves, when riding after a small species of deer (*Cariacus campestris*) in the open "campo" of Uruguay, smelt these beasts at a considerable distance. Though there are seldom any trees in a deer forest, the use of the name confirms the opinion that vast regions of the Highlands were formerly covered with indigenous forests. The author traces the conditions of the country through the early days of royal forests and forest laws, to the more modern times of cattle raising, when, and until the introduction of sheep farming on a large scale at the end of the last and beginning of the present century, the whole of the northern part of Scotland might almost have been described as one vast deer forest. The chapter on Social and Economical Aspects is a valuable contribution. Herein are discussed the attacks made on deer forests, the judgment on them by royal commissions and parliamentary committees (all these reported unanimously in their favour), and the possibilities of redressing and grievances that may exist.

"Stag Hunting" treats of the chase of the wild red deer in days of yore; in France, where it appears to be conducted on the same principles in the nineteenth as it was in the fourteenth century; and in Devon and Somerset, which does not seem to have ever (as far as west country records go) had much in common with that previously treated of. The subsequent chapters deal of the Modern Chase, Horses and Hounds and Deer, and this part concludes with useful notes for visitors. There is a good deal of natural history to be found in these chapters. If the "fraying" (or marks of rubbing by horns) is against a big tree, it is a certain sign of a big stag. If the bark of a tree or the ivy growing on it is gnawed up and down, it is the work of a hind, but if the bites are across the trunk they are a stag's. According to a harbourer of five and twenty years' experience, the common theory that a stag takes but one bite out of a turnip before he throws it over his head, while the hind takes several, cannot be depended on; but the passion of stags for the young ash-shoots on a newly-made fence is well marked. As to the "slot," the main difference between the sexes is that the slot or foot-print of a stag is rounder and wider at the heel and has blunt toes, while a hind has pointed toes and a long slot with narrow heels. These are a few examples of the careful and minute observations to be found in this valuable and delightful history of the red deer in the west country. A moderate estimate gives the number of deer in Devon and Somerset at the present day as four hundred in round figures. As the very existence of the wild red deer in the west depends almost entirely upon the continuance of the chase, it is satisfactory to read that this has a very strong hold on the people of the country round Exmoor, and that all classes take a keen interest in the hunting.

Mr. Shand's contribution is not merely by way of being a recipe book; but in a most able and charming essay he traces the influence of venison in the history of the world, and on its literature and art. Venison has played an important part in the story of the human race, and the author points out that had Esau come home half an hour sooner with his haunch of venison, the destinies of a great part of the world would have been altered! It is consoling to be told that a modest

roasted neck may rival the more sought-after and sumptuous haunch, but we should like to put in a word for a saddle, cut, if you can get it, from between the haunch and the fore-quarter.

The illustrations in this volume, by J. Charlton and A. Thorburn, are as pleasing as usual. "Driven off the Hill" is a beautiful picture of a winter scene in the Highlands.

O. V. Aplin.

TO LONDON'S HEART.

An Appeal for the Churchyard Bottom Wood, Highgate.

You who have gazed from that old forest hill
  And seen the smoke of London blur the day,
  Then turned your face a little while away
And felt your heart throb, and your dim eyes fill
To find a primrose-tuft, or hear the thrill
  Of some bird-throat that sings a marriage lay,—
  Think of what treasure might be turned to clay
If here the hand of mammon worked its will!

O mighty mother of the teeming throng
  Who pent in purblind alleys toil and die,
    Nor ever look on Nature's tender face,—
    Keep for thy sons at least one little space
  Where through the hazels men may see blue sky,
And hear at morn and eve the blackbird's song.

H. D. Rawnsley.

SHORT NOTICES OF BOOKS.

Those who have not yet made the acquaintance of the writings of John Burroughs—"the American Jefferies" as he has been called—will find a pleasant means of so doing in the pretty volume of selections which Messrs. Smith, Elder & Co., have published under the title of *A Year in the Fields.** The essays selected are not, perhaps, those which we should ourselves have chosen for English readers, as we find among them none of the delightfully fresh descriptions in which Mr. Burroughs recorded his acquaintanceship with the birds and flowers of this country; from this and from the unpleasant spelling which continually meets the eye, we are inclined to think the volume was prepared for home (*i.e.*, American) consumption, and is printed here from American plates. Be that as it may, it is very well printed; and the illustrations from photographs enable us to become personally acquainted with the haunts of the author, while the frontispiece portrays him "in his habit in which he lives." Burroughs lovers will remain content with Mr. David Douglas's little square volumes, which fit so comfortably into the pocket; but we imagine that this selection will find a place on many a Selbornian shelf.

* *A Year in the Fields:* Selections from the writings of John Burroughs; with illustrations from photographs by Clifton Johnson. London: Smith, Elder & Co. 8vo, pp. ix. 220. Price 6s.

Mrs. Caldwell Crofton takes us into the garden, and her *Garden of Peace** is a pleasant place to visit, filled with birds and flowers, and tended by one who is in thorough sympathy with both. One exception we note—"the sparrow has nothing to recommend him, his nest is untidy, and his knowledge of architecture is *nil*." This is what comes of living in the country; we Londoners are grateful to the sparrow, the only representative of his race who brings bird-life into our smoky streets and dirty little gardens. Mrs. Crofton is, we think, more at home with birds than with flowers; Mr. New—and we say it with regret, for much of his work in other places is excellent—is familiar with neither, and his illustrations do not add to the value of the book. Is there not a danger just now of overdoing illustrations? It seems to us that unless they are good, their presence only detracts from the appearance of a book. It must not be overlooked that the author has an agreeable sense of humour. The chapter, "A Study in Doves"—with its closing scene and the moral, "you may still write in poetical language about the ideal dove, but there never was such a scene of rage and jealousy witnessed in the 'garden of peace' until the doves came"—well exemplifies this. It is unnecessary to say that the book is in every way elegant.

Here are three more of the volumes published by Messrs. Bell & Sons for the Humanitarian League—*Poor Blossom*, the story of a horse (1s.); *Man's Helpers*, by Miss Carrington; and *Featherland*, by Manville Fenn. The first is an old favourite, to which Miss Carrington has added an excellent selection of anecdotes about horses. In *Man's Helpers* we have a readable account of the beasts, birds, and insects who, in various ways, are of benefit to man. In *Featherland* the birds tell their stories in the way familiar to those who know *The Robins*: do the youngsters of the present day care for this mode of narration? All the books are well illustrated—the two first especially, and these are extremely suitable for use in school libraries, as prizes, and the like.

The new popular edition of *Familiar Wild Flowers*, by F. E. Hulme (Cassell & Co.), of which we have received the first number, is interesting as an instance of the application of photography to colour printing, and of the cheapness with which such work can be produced as compared with the cost of the older method of chromo-lithography. In the latter the desired effect is obtained by a series of impressions from some six or eight colour stones. In the newer or three-colour process three printings only are requisite, and the metal plates by which the yellow, red, and blue inks are impressed upon the paper, are prepared by photographic methods. Three negatives of the original are obtained by exposure through special coloured screens, with the result that upon one negative is represented the yellow, upon another the red, and upon the third the blue, of the constituents into which the various tints of the original can be resolved by optical means. From these negatives the corresponding process blocks are prepared. In the resulting print it will be found that the image consists of an infinite number of red, yellow, and blue dots, and that the variety of tints arises from the blending of these primary colour spots when viewed at a sufficient distance from the eye. In theory the method is excellent; in practice there is usually room for improvement. In the present instance the illustrations are as good as could be expected, but it cannot be said that they satisfy the expert botanical eye. However, the process is likely to improve with practice. Hitherto it has been but little used in this country, and the present case is probably its first application upon so large a scale. There are to be 200 plates in the present edition, which will appear in twenty-one weekly parts, price sixpence each—less than half the cost of the earlier edition. The letterpress is printed from stereotyped plates, so that errors found in the earlier issue persist in the present. An alteration will be found in the plate "Sweet Violet." The plate "Borage" is more like the plant than was its chromo-lithographed predecessor. The work will, doubtless, command a large sale.

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* *In the Garden of Peace*, by Helen Milman (Mrs. Caldwell Crofton), illustrated by Edmund H. New. London: John Lane. 8vo, pp. 182. Price 5s. net.

SELBORNIANA.

Fined for Killing a Kingfisher.—We have much satisfaction in reprinting the following:—

"Charles Upsdell, a boat builder, of Shepperton, was summoned at the Spelthorne Sessions, held at Teddington, for killing a kingfisher on the Thames, near Chertsey, on February 17, contrary to the bye-laws of the Thames Conservancy. He was also summoned for unlawfully discharging a firearm at the said time and place, contrary to the bye-laws. Mr. L. Hackett, landlord of the Bridge Hotel Tap, Chertsey, said that he saw the defendant in a punt in a backwater near witness's premises. The defendant took up the gun and shot at the kingfisher, witness seeing it fall. The punt afterwards drifted across the stream, and the defendant picked up the bird. Witness saw the kingfisher, which was not quite dead, lying on the seat of the punt. Albert Howe, who was in the taproom of the Bridge Hotel, gave corroborative evidence. An absolute denial was given to the charge, it being stated that Upsdell picked up the kingfisher out of the water and was going to have it stuffed, but found it was too decomposed to allow of that. Three witnesses were called for the defence, who bore out that statement. The Chairman (Mr. J. Ashby) said that the Bench were quite satisfied that the defendant had shot the kingfisher, and he would be fined 10s. and 19s 6d. costs in each case."

Hampstead Heath.—We are glad to learn that Hampstead is going to form a Hampstead Heath Protection Society, for "protecting the Heath and preserving its natural beauties." The old residents and the townspeople are equally determined to try every means to prevent the Heath "being turned into a smug park," to quote Sir Walter Besant. A public meeting will be held at the Drill Hall, Heath Street, on April 7, at 8.30, E. Brodie Hoare, Esq., M.P., in the chair. The Honorary Secretary (*pro tem.*) is Miss Emily Field, Squire's Mount, Hampstead, N.W.

A Substitute for "Aigrettes."—The *Daily Chronicle* says:—

"The agitation against the custom of wearing osprey feathers seems at length to be bearing fruit, and London milliners are unanimous in declaring that their customers refuse to wear hats or bonnets adorned with osprey aigrettes. Fortunately a very excellent substitute for the osprey has been provided by some ingenious Frenchman, in the shape of an aigrette made from whale-bone, finely shredded and curled in such a way that it has a very light and feathery effect."

[We must again caution our readers against being deceived by the representation of interested persons that the "aigrettes" now in use are largely spurious. Only last week some were submitted to us which were said to be imitation, but Dr. Sharpe informs us that they are the real thing.—Ed. *N. N.*]

The Extermination of the Golden Eagle.—The bird butchers are at it again. In the *North Eastern Daily Gazette* of February 17, it is recorded that a golden eagle has just been shot in East Yorkshire. This is the second killed within three months near the coast, and I have authentic records of two more instances which occurred in Scotland during 1896. Seebohm, one of our most able and reliable naturalists, says: "Before it is too late, Scotchmen, protect your national bird, the eagle of your ancestors, and stay the cruel war waged by grouse-shooter, deer-stalker, sheep-farmer, and skin-collector—war which will, ere long, play its part but too surely and take the golden eagle from your mountains for ever." What are our County Councils about? The powers given them by the Wild Birds Protection Acts of 1880 and 1896 ought to be enforced more vigorously and universally than they are. A period of protection for the golden eagle is wanted, and the Home Secretary should be asked to give the bird protection all the year round.

79A, *Great Queen Street, W.C.* JOSEPH COLLINSON.

How to Encourage Birds.—I shall be greatly obliged if you, or any of your readers, will give me some information as to the best means to encourage the nesting of birds in my garden. Our feathered friends are an endless source of

pleasure to us, appreciated all the more because we live in a London suburb, within 4½ miles of Charing Cross. Each year there are three or four blackbirds' nests in our garden; sometimes a chaffinch, blue titmouse, robin or thrush will build, and we have frequent visits from great tits, hedge-sparrows, greenfinches and another bird, which I take to be a garden-warbler. Unfortunately, there are few suitable places for nesting, and it occurred to me that something might be done to encourage the birds named by using nesting-boxes, such as are evidently used by some of your correspondents. I should be glad of information as to the kind of box used, and the most suitable positions for them, the aspect, and so forth. Two years ago a blue-tit built in my garden wall within a yard of the high road, but the newspaper-boy found the nest, and the young ones were taken, presumably on the very day they would have flown. At any rate, one did escape, a considerable distance from home. I have not had the opportunity of carefully studying bird-life, but I think the following must be a very unusual experience:—A blackbird built last year in a low pear tree in my garden, early in the season, and, as I believe, brought off *four* broods from the same nest. I can personally vouch for two in rapid succession. I was told that the bird was sitting for the third time, but did not myself see it, and, on my return from my holidays, heard from my children that the third brood had flown. I certainly saw, in confirmation, young birds in the garden, and the nest was empty. After this, I saw the old bird again sitting in the nest, late in the year, on what I believe were the fourth, and unquestionably were the third, lot of eggs. She safely reared them. I should be glad to know whether this is not quite exceptional. Will birds build a second year in the same place if the old nest is removed; or is it an inducement to them if the nest be left untouched

Tulse Hill ROBIN.

A Plea for the Robin (p. 37).—If the statement of your correspondent is correct, cannot some remedy be found for the slaughter of robins? One would have thought that national sentiment would have protected him, but it does not seem so. The gradual extermination of the egret seems to be but little affected by the great difficulty which is experienced in obtaining it. But what must be the fate of the robin, whose tameness and confidence in man must necessarily go against him, if this inhuman fashion of wearing robins' plumage once takes root?

G. H. S.

Highgate Woods.—We are glad to note that the joint committee appointed to secure for the public Churchyard Bottom Wood at Highgate have lost no time in taking action. They have issued a circular giving particulars of the little bit of "primæval forest" which it is intended to secure, and appealing for aid. Some £15,000 remains to be raised, and public grants and private donations ought soon to amount to that. Highgate Wood, in the words of the Chairman of the Committee, Mr. Cory Wright, is "one of the choicest and most sylvan pieces of woodland which is to be found anywhere within the five-mile radius of Charing Cross," and it ought to be preserved. The Secretary of the Fund is Mr. Lionel Curtis, 1, Great College Street, Westminster.

NATURAL HISTORY NOTES AND QUERIES.

The Barn Owl in Captivity.—In NATURE NOTES for 1895 (p. 173) I gave an account of my barn owls and the rearing of young in captivity. The first year that the eggs were hatched out I only succeeded in getting one bird, and owing probably to insufficient care in the matter of food, during a short time I was away, I lost this one when about six months old, and I am sorry to say that it was eaten by the old birds, probably after death. Last year two owlets were hatched out on March 19, and I have now removed them from the nest and placed them in a separate owl house. They are both exceedingly fine young birds, in perfect plumage, and, curiously enough, one closely resembles the cock, and the other the hen bird, in both build and face. I notice that they are both lighter in colour than the parent birds, and the spots on the white breasts are very much less defined. I am inclined to think that the plumage deepens in

colour as the bird grows older, and that the variable nature of the colour of barn owls is due partly to the age of the bird. After I have had more experience in breeding and observing them I shall be better able to judge if this is the case. The care which the parent birds extend to their young is remarkable, and lasts throughout the whole year, and it is clear from the calling that goes on between parents and young since the separation that they have by no means forgotten each other. I thought it advisable to remove the young birds at this season, as nesting operations would be in progress, and I was anxious to avoid overcrowding in the tree trunk when fresh owlets were hatched. There are the usual two eggs already laid and sitting is in progress, so that I expect before this month is out I shall have another pair. If they breed every year I shall have difficulty in knowing what to do with my birds, as I fear it would scarcely do to let them fly, though I shall, I think, try the experiment. I am glad to say that the chief land owner in the neighbourhood, Mr. Combe, has given strict orders to his keepers not to destroy owls. If only others would follow his example we should not only have the delight of watching these beautiful birds, but should be less annoyed by rats than we are at the present time.

Farnham. ROBERT MORLEY.

What would he do with it?—It was only to-day that I learnt that the water rat does not eat either fish, flesh or fowl. But two or three years back, when standing on the bank of a pond in Surrey, I perceived a fine full-grown rat swim across the surface, with a small roach in his mouth. I naturally thought that the water rat intended devouring his prey, but perhaps he was only going to make a present of it to some carnivorous acquaintance!

Shere, Surrey. MARIAN FISHER.

"A Trio of Vocalists" (p. 1).—Many kind letters have reached me showing the interest taken in my "trio of vocalists," and from the advice given I have resolved not to attempt to let the blackcap and nightingale at liberty. It seems likely that such a step would merely lead to the miserable death of the bird. The three pets are in perfect health. The blackcap began singing last December, and warbles from morning till night a cheery happy song, not much resembling its wild note, but much softer and very sweet in tone. Some phrases are repeated two or three times after the manner of a thrush. The irrepressible bird will sing in and out of its cage, when covered by a shawl, or under almost any circumstances. When I stand close to it it will warble joyously, looking up at me the while, as if telling me a long and interesting story. "Fairy," the whitethroat, began singing about the middle of February, so the two birds carry on their charming duets all day long. The nightingale is still mute save for the croak-like sound he emits when annoyed at the sight of a robin near his cage.

ELIZA BRIGHTWEN.

Great Northern Diver (p. 38).—I am very much obliged to your two correspondents for correcting my statement about the great northern diver (*Colymbus glacialis*). But as, quite recently, I have been collecting all the available information respecting the status of this bird in Great Britain, without being able to discover any *published proof* of its breeding on any part of the Scotch mainland, I felt justified in characterising the bare statement that this species breeds in the north of Scotland as an inaccuracy. That there are grounds for *believing* that the species in question has bred in the Shetland Islands, I am well aware. But Mr. Ernest N. Savage's statement that the great northern diver (*Colymbus glacialis*) has bred in 1896, and "for several years past, not very far from Roshven, where Mrs. Blackburn lives" (I assume, in Inverness-shire?) will, I am sure, be news to British ornithologists in general; indeed, Mrs. Blackburn herself does not allude to the fact—perhaps from motives of prudence. Having regard to the intense interest attaching to the subject, Mr. Savage will, I am sure, pardon the anxiety which ornithologists must naturally (and excusably I venture to think) feel to be assured that the birds which Mr. Savage observed breeding in the locality indicated were really examples of the great northern diver (*Colymbus glacialis*), and not individuals of another large diver, viz., the black-throated diver (*C. arcticus*), which, in addition to the smaller red-throated diver (*C. septentrionalis*), is well known to find summer quarters on the lochs

of Inverness-shire and adjoining counties ; as also in Sutherlandshire, whence Mrs. Blackburn received the dead young diver covered with down, mentioned in the book which was the subject of my review. Similarly, definite and further proof of the identity of the eggs taken by Mr. Edmund T. Daubeny's friend in the north of Scotland, and shown to him five or six years ago, might excusably be desired by those interested in the subject without their incurring a charge of undue scepticism. Meanwhile, Mr. Howard Saunders assures me that, after investigating the matter, he is aware of no evidence that the great northern diver has bred on the Scottish mainland, and further, that there is as yet no proof that the bird has bred in the Shetlands.

Bloxham, Oxon. O. V. APLIN.

Curious Habit of a Mocking Bird.—I have a northern mocking bird (*Mimus polyglottus*) which is very fond of settling on the hearthrug in front of the fire, stretching out one wing until the primaries touch the floor, and then, throwing back its head and half opening its bill, it will remain quite motionless for ten or fifteen minutes. I have another bird of the same species which never shows any inclination to behave in this way, and I should like to know whether a similar habit has been observed in any of our English thrushes.

F. W. A.

ANSWERS TO CORRESPONDENTS.

A. M. W.—You evidently have not read the editorial note appended to the notice you refer to.

M. A. P.—It is not easy to understand your question ; but of course a *true* parasite cannot be "grown in the ground."

L. B. S.—The moth is *Anticlea brachiata*, which appears in March and April, or earlier in mild winters. The caterpillar feeds on rose trees in June ; it is a common species. Please read Rule 4.

D. A. H.—We are always willing to help our correspondents, but we think we ought not to be asked to name Chickweed and Shepherd's Purse, even when *Cardamine hirsuta* is mixed with the latter, as is the case with your specimens.

J. H.—We agree with you, and had your note been shorter would have printed it.

G. C. G.—See Mr. Aplin's note on p. 78.

G. C. S.—We fear it is too true.

RULES FOR CONTRIBUTORS AND CORRESPONDENTS.

1. All communications for NATURE NOTES must be authenticated with name and address, not necessarily for publication.

2. The return of unaccepted contributions cannot be guaranteed. We cannot undertake to name specimens privately, or to return them.

3. All communications for the May number must be in the Editor's hands by the 10th of April.

4. Communications for NATURE NOTES should be addressed to the Editor, JAMES BRITTEN, F.L.S., 126, Kennington Park Road, London, S.E., as should specimens for naming, books for review, &c. The Editor cannot undertake to reply privately to questions.

5. Letters connected with the Selborne Society, as well as all inquiries as to the supply of NATURE NOTES, and subscriptions, should be addressed to the Secretary of the Selborne Society, A. J. WESTERN, Esq., 20, Hanover Square, W.

6. The Editor is not responsible for the contents of the last page of each number : communications respecting that page must be addressed to Mr. WESTERN, as above.

SELBORNE SOCIETY NOTICES.

Annual Meeting and Conversazione.—This has been fixed for Thursday, May 20, from 7.30 to 10.30. The meeting will commence at 8 o'clock. Offers of Natural History exhibits, photographs, music, &c., are requested, and should be made to Mr. G. H. Edwards, Hon. Sec., Conversazione Committee, as soon as possible.

Excursion to Selborne.—It has been found necessary to make an alteration in the date. Members will please note that the excursion will now take place on Saturday, June 12.

New Junior Branch.—The Council notes with much pleasure the formation of a Junior Branch of the Selborne Society at Hatfield, of which the Rev. H. G. O. Kendall is the Hon. Secretary and Treasurer.

Winter Lectures.—On March 15 an exceedingly interesting lecture was delivered on behalf of the Society by Mr. A. Holte Macpherson, F.Z.S., on "Birds," at a meeting of the St. John's Guild, Hammersmith.

Field Club Rambles.—These are held every Saturday throughout the summer. All communications to be made to Mr. E. A. Nash, Hon. Sec. Field Club Committee.

April 24. — First ramble of the season. Leave Highams Park Station on the arrival of the 2.34 train from Liverpool Street (Clapton 2.45), thence through Highams Park to Chingford. Tea at Forest Hotel about 5 p.m. Return day ticket to Chingford from Liverpool Street, 1s., Clapton, 8d. Guide, Mr. R. Marshman Wattson.

May 1.—Visit to Kew Gardens. Waterloo, 2.30; Clapham Junction, 2.40; Kew Bridge Station, 2.57. Broad Street, 2.8; Kew Gardens Station, 2.43. Return ticket, 1s. 2d. Meet at main entrance to Gardens, Kew Green, 3.15.

Council and Committee Meetings.—Meetings are now held on the first and third Tuesdays in each month. The next meetings of the Council will be held on April 6 and May 4 at 5.30: of the Magazine and Leaflet Committee on April 20 and May 18, at 5.30; and of the Conversazione Committee on April 6, after the Council Meeting.

NEWS FROM THE BRANCHES.

Abinger and Shere.—Professor Boulger gave a very interesting lecture on "The Ground Beneath Our Feet" on February 23, at Peaslake. The Club-room was crowded, many being turned away from the door. The artisans who attended have expressed warm appreciation of the lecture.

Clapton.—The Annual Meeting of the Branch was held at Upland College, Stoke Newington, on March 6, when the report was read and adopted, and the officers for the ensuing year elected. An interesting lecture by Mr. C. Montague on "The House Fly" followed, and was illustrated by excellent diagrams.

Croydon and Norwood.—A lecture was delivered by the Hon. Sec. at Moffatt Hall on March 9, on "A Lump of Chalk." The Annual Meeting will take place on April 21, by permission of Mrs. E. Phillips, at Vaughan House, Morland Road, Croydon.

Dover (Junior Branch).—A lecture was delivered at Dover College on March 20, on "Gilbert White and the Village of Selborne," by Mr. E. A. Martin, F.G.S. The lecture was illustrated by the limelight lantern, under the management of Mr. Williams.

BRANCH PAYMENTS FOR 1896.

	Magazines.	*Branch Contributions.*
Abinger and Shere	2 1 2	0 17 3
Bath	4 1 8	..
Kensington	12 17 6	...
Weald of Kent	...	0 8 10
Wimbledon and Putney	2 0 3	3 0 0

Preparation of Balance Sheet.—Hon. Secs. of Branches who have not yet sent in their payments for Magazines for 1896, or their Branch contributions, are requested to kindly do so at once.

EDWARD A. MARTIN, F.G.S.,
Hon. Sec., Magazine and Leaflet Committee.

Nature Notes:
The Selborne Society's Magazine.

No. 89. MAY, 1897. Vol. VIII.

NATURE-POETRY.

(*Concluded from p.* 71.)

IT is well to bear in mind that, while the author was revising his poem, Pope, whose friendship Thomson had gained before he came to Richmond, was a frequent visitor at our poet's house, while Thomson was an equally frequent visitor to Pope at Twickenham. This intimacy shows Pope at his best, welcoming his brother bard with the new style, and actually writing for him in that style the only pieces of blank verse that he ever wrote. Now and then Pope would suggest a felicitous line or epithet, which Thomson, no slavish follower, did not always accept; and once, in the story of Lavinia, Pope (in his sole bit of blank verse) wrote this lovely simile, which our poet wisely adopted:—

> "As in the hollow breast of Appennine,
> Beneath the shelter of encircling hills,
> A myrtle rises far from human eye
> And breathes its balmy fragrance o'er the wild,
> So flourished blooming and unseen by all
> The sweet Lavinia; till, at length compelled
> By strong necessity's supreme command,
> With smiling patience in her looks, she went
> To glean Palemon's field."

From Pope our poet acquired the habit of labouring over his poems to bring them into their best form; and in this good habit he has been followed by most of our Nature-poets, notably by Wordsworth, Shelley and Tennyson. In one of the many editions of "The Seasons," issued by Thomson while Pope was lying, in 1744, on what proved to be his death-bed, he pays his friend a well-deserved tribute in the following fine passage of Nature-poetry, delineating the scenery around the dwelling-places of both poets:—

"Here let us trace the matchless vale of Thames,
Enchanting vale! beyond whate'er the Muse
Has of Achaia or Hesperia sung,
Fair-winding up to where the Muses haunt
In Twickenham's bowers, and for their Pope implore
The healing God; to royal Hampton's pile;
To Claremont's terraced height, and Esher's groves;
Now to the sister-hills that skirt the plain,
To lofty Harrow now, and now to where
Majestic Windsor lifts his princely brow."

Of the beauty of this vale a resident in it has been often heard to say, when admiring some beautiful scenes visited by him in his holidays, that whenever he got home and saw a sunset or moonlight over the valley of the Thames, he was wont to say that, after all, no scenery anywhere, whether in Switzerland, or Norway, or anywhere else, seemed so lovely to spend one's life in as that which lay around his own home. While Thomson was living in Richmond he was quietly labouring over his masterpiece, "The Castle of Indolence," which, however, he did not produce till his death, in 1748, and then in an unfinished state. This fine poem is one which, though in a playful tone, struck, with its underlying earnestness, the deeper notes of life; and it is written in the finest stanza that has ever been used in any language, ancient or modern, a stanza that adapts itself with equal readiness to almost all kinds of poetry, and takes its name (the Spenserian stanza) from the great poet who used it with such transcendent skill in his "Faery Queen." The following stanza from this poem, which expresses the poet's noble protest against the belief that wealth can confer happiness, will show the way in which Nature-poets in general treat their subject:—

"I care not, Fortune, what you me deny;
You cannot rob me of free Nature's grace;
You cannot shut the windows of the sky,
Through which Aurora shows her brightening face;
You cannot bar my constant feet to trace
The woods and lawns by living streams at eve;
Let health my nerves and finer fibres brace,
And I their toys to the great children leave:
Of fancy, reason, virtue, nought can me bereave."

It is interesting to note that at the very time when Thomson was writing about leaving their toys to the great children, his brother-poet was developing the same idea, in his totally different style, in this beautiful vignette:—

"Behold the child, by Nature's kindly law,
Pleased with a rattle, tickled with a straw;
Some livelier object gives his youth delight,
A little longer, but as empty quite;
Scarfs, garters, gold, allure his riper age,
And beads and prayer-books are the toys of age;
Pleased with his bauble last, as that before,
Till tired, he sleeps, and life's poor play is o'er."

Coincidences not in thought merely, but even in expression, may be abundantly detected in the poetry of Thomson and his followers. In "Autumn," for example, Thomson has a fine descriptive passage on nutting, and the same scene is described by Wordsworth, who, however, discovered what had escaped the robuster paganism of the elder poet, that "there is a spirit in the woods," and expressed it thus, in a form specially his own :—

> "Then, dearest maiden, move along these shades
> In gentleness of heart, with gentle hand
> Touch, for there is a spirit in the woods."

Of so sweet a harbinger of Nature-poetry and the return to Nature no fitter place could be found for a Memorial than the scenery celebrated in his verse; and there, accordingly, on Richmond Hill, overlooking the "matchless vale of Thames" which he describes, and on a spot wherefrom, in the distance, you may see where "majestic Windsor lifts his princely brow," we are reminded of the sweet Nature-poet by a tablet bearing lines of which these are the first four :—

> "Ye who from London's smoke and turmoil fly
> To seek a purer air and brighter sky,
> Think of the Bard who dwelt in yonder dell,
> Who sang so sweetly what he loved so well."

Monuments stand to Thomson's memory in various places. In Richmond parish church, where he lies buried, a brass tablet, by no means imposing in appearance, was put up in 1792 by David Stuart, Earl of Buchan; an ambitious but abortive obelisk was put up by the same Earl on Ferney Hill, near Ednam, where the poet spent but the first two months of his life, and in the best corner of our national Walhalla, Westminster Abbey, his statue stands near to that of Shakspere, and underneath the bust of Burns, with these lines from his own poem on "Summer" :—

> "Fostered by thee, sweet Poetry exalts
> Her voice to ages, and informs the page
> With Music, Image, Sentiment, and Thought,
> Never to die."

But the only memorial that is often seen and considered is that which stands in the very best of all places, on Richmond Hill.

The country that has produced such writers as we have mentioned, to which may be added the names of William Brown and John Clare, may well claim to stand at the head of all in regard to descriptive poetry; and among the very highest of Nature-poets must be placed the name of our late honoured Poet-Laureate. Wordsworth said that "Tennyson is not much in sympathy with what I should myself value most in my attempts, viz., the spirituality with which I have endeavoured to view the material universe, and the moral relations under which I have endeavoured to exhibit its most ordinary appearances." Though Wordsworth was probably right in saying that his successor in the Laureateship did not see into the life of things in the same

degree that he did himself, yet the very name of Tennyson will carry the reader back to the days when he revelled in the delights of the English Idylls, reading the precious volume amid the carols of bird-voices from the wood, the cawing of rooks, and the lowing of kine knee-deep in the river-shallows, when

> "Twilight poured
> On dewy pastures, dewy trees,
> Softer than sleep."

As a painter of the beauties of Nature for their own sake, Tennyson is superb. In delineating the contour of the land, he allows himself a freedom of composition unknown to the art of Wordsworth; and it is this that lends to his pictures a brilliance which is one of their chief characteristics. These pictures are flashed upon the very senses of the reader and not merely upon his perception. The composition of landscape in "Khubla Khan" is scarcely more bold than it is in some of Tennyson's quiet pictures. So consummate an artist is he in rendering the scenery of his native land, that his exercise of this faculty has often proved a stumbling-block to many who have tried to localise his pictures. In singing the song of the brook, he is not celebrating one particular streamlet; but the burden of his immortal song gives us the summer setting of the fairy forelands, the sailing blossom, the fresh wet ferns of any flat country. In the power of calling up imaginary landscapes, Tennyson is unsurpassed among English poets. Had he been as familiar with the loveliness of the Pacific islands as Louis Stevenson, he could not have described it better than he has in the last eight lines of those marvellous verses to Milton, the whole of which, as a splendid specimen of Alcaics, is well worthy of attention :—

> "O mighty-mouthed inventor of harmonies;
> O skilled to sing of Time or Eternity;
> God-gifted organ-voice of England,
> Milton, a name to resound for ages;
> Whose Titan-angels, Gabriel, Abdiel,
> Starred from Jehovah's gorgeous armories,
> Tower, as the deep-domed empyrean
> Rings to the roar of an angel-onset;
> Me rather all that bowery loneliness,
> The brooks of Eden mazily murmuring,
> And bloom profuse and Cedar arches
> Charm, as a wanderer out in ocean,
> Where some refulgent sunset of India
> Streams o'er a rich ambrosial ocean-isle,
> And crimson-hued the stately palm-woods
> Whisper in odorous heights of even."

Tennyson stands high among Nature-poets as a painter of the vegetable world of England, which seems to share in his enjoyment of

> "Groves that looked a perfect paradise
> Of blossom, over sheets of hyacinth,
> That seemed the heavens upbreaking through the earth."

This is a qualification in which the English have always delighted; it meets us in our earliest Nature-lyrics, as, for instance, in that lovely cuckoo-song of the twelfth century:—

> "Summer is a-coming in, loudé sing, Cuckoo:
> Groweth seed, and bloweth mead, and springeth the wood new,
> Ewé bleateth after lamb; loweth after calvé cow;
> Bullock sterteth, bucke verteth, merrie sing, Cuckoo."

Connected with this is the poet's love of the lakes, meres, and brooks that do so much to foster this vegetation, and on these Tennyson always writes lovingly. Wordsworth presents a memorable picture in his couplet,

> "The swan on still Saint Mary's Lake
> Floats double, swan and shadow;"

but equally noteworthy is Tennyson's line

> "The long light shakes across the lakes."

Notwithstanding all that has been done in this line since Shakspere and the Elizabethan poets, especially by Wordsworth, Keats and Shelley, it may be claimed for Tennyson that he has written Nature-lyrics that will make England more beloved than ever it was found before. And it must be observed that a naturalist might enter in his note-book any of Tennyson's descriptions, such as

> "The twinkling laurel scatters silver lights,"

with entire confidence that they would never be impeached; a thing that cannot always be said of many a scientific observer.

As a painter of bird-life he is very happy. He was a genuine lover of birds; and there are few English birds that have not found mention in his verse. The blackbird he was fond of, and he refers to the golden dagger of his bill; but the thrush was his especial favourite, and he has imitated the thrush's song, so far as words can do it, in the following lovely lyric:—

> "'Summer is coming, summer is coming, I know it, I know it, I know it;
> Light again, leaf again, life again, love again;' yes, my wild little poet.
>
> Sing the new song in under the blue, last year you sang it as gladly;
> 'New, new, new, new'! Is it then so new that you should carol so madly?
>
> 'Love again, song again, nest again, young again'; never a poet so crazy;
> And hardly a daisy as yet, little friend; see, there is hardly a daisy.
>
> 'Here again, here, here, here, happy year'; O warble unbidden, unchidden;
> Summer is coming, is coming, my dear, and all the winters are hidden."

Keats too loved the Paradise of England, with its landscape, trees, leaves, flowers, grass and birds; and from the very first

> "There was a listening fear in his regard,"

because something seemed to whisper that he should not enjoy it long. In his very earliest poem, which formed a fitting preface, in his romantic style, to the work which his short life

enabled him to give us, Keats presents this lovely sketch of goldfinches :—

> "Sometimes goldfinches one by one will drop
> From lowhung branches ; little space they stop ;
> But sip, and twitter, and their feathers sleek ;
> Then off at once, as in a wanton freak ;
> Or perhaps, to show their black and golden wings,
> Pausing upon their yellow flutterings."

In the same poem he gives us this pretty sketch of minnows :—

> "Where swarms of minnows show their little heads
> Staying their wavy bodies 'gainst the streams,
> To taste the luxury of sunny beams
> Tempered with coolness. How they ever wrestle
> With their own sweet delight, and ever nestle
> Their silver bodies on the pebbly sand.
> If you but scantily hold out the hand,
> That very instant not one will remain ;
> But turn your eye, and there they are again."

Though Tennyson is admirable in depicting bird-life, he is more admirable still as a painter of fish, in which few poets have surpassed this lovely simile in "Enid" :—

> "Like a shoal
> Of darting fish, that on a summer morn
> Adown the crystal dykes at Camelot,
> Come slipping o'er their shadows on the sand ;
> But if a man who stands upon the brink,
> But lift a shining hand against the sun,
> There is not left the twinkle of a fin
> Between the cressy islets white in flower."

The great laureate of the winds is Shelley ; but as a Nature-painter of winds on the sea, few of our poets can surpass Tennyson, whose power is well displayed in this passage from "Elaine" :—

> "As a wild wave in the wide North-sea,
> Green-glimmering toward the summit, bears with all
> Its stormy crests that smoke against the skies,
> Down on a bark, and overbears the bark,
> And him that helms it."

To that may be added this passage of waves breaking on a table-shore :—

> "As the crest of some slow-arching wave,
> Heard in dead night along that table-shore
> Drops flat, and after the great waters break
> Whitening for half a league, and thin themselves
> Far over sands marbled with moon and cloud,
> From less and less to nothing."

We observe that he does not indulge in the usual generalities about emerald green billows, dark blue sea and the like, but writes his descriptions as true as those of a naturalist. His adjectives of colour are never used, in the ordinary way, for mere

ornamentation, but are employed in a classification as true as that of a man of science.

With Tennyson, this Essay on Nature-poetry may well be brought to a close. Other writers are carrying on the same poetry, in prose or in verse; others will hereafter follow them in the same strain, so long as our land remains as it is. We are blest to live in a country where Nature is herself poetical, and deserves to be celebrated, for her own sake, in the very best of Nature-poetry. Our spring-meads, with their buttercups and daisies, are redolent of poetry; and the field-paths that take us through them, and the hedgerows white with hawthorns, and resounding with the songs of birds, are alike poetical. Of all peoples, therefore, we should always be the first, as we are now, to cultivate that Nature-poetry to which attention has been called in this Essay.

W. J. C. Miller.

WILD NATURE AT THE GROVE.

AS a reward for long years of kindness shown towards squirrels and all kinds of birds, I now enjoy every morning a perfectly delightful performance of tamed wild creatures quietly feeding outside the dining-room window.

As I enter the room I see brown furry faces peering in at the bottom of the window-pane, anxiously watching for my arrival.

The squirrels know quite well that my first act will be to open the window, whereupon a shower of nuts will descend for their benefit, and in a few minutes the fascinating little animals come flocking from the shrubberies on all sides, until as many as nine or ten of them may be seen sitting up with their graceful tails curved over their backs, nibbling the nuts or indulging in fussy skirmishes with each other.

The next contribution to my wild pets is a bowlful of sopped bread, which is thrown out for the benefit of my winged visitors. From beneath the sweeping branches of the trees hen-pheasants run swiftly towards the window, and so completely have these usually shy birds become tamed, that if I throw a piece of bread to them they will try to catch it in their beaks, and whilst feeding they look up with quiet confidence, and do not in the least mind our watching their movements.

Sometimes a pheasant will run off with a piece of bread upon the lawn, and then is the opportunity for some marauding jackdaws to swoop down, and in an unguarded moment they seize the bread, to the great surprise of the simple-minded pheasant. Several pairs of blue-gray and russet nuthatches now arrive and take their share of the nuts, which by this time are be-

coming scarce; so now, pressed by these feathered rivals, the squirrels leap upon the window-ledge and take their favourite food from our very hands. I have not spoken of the tribes of birds—robins, sparrows, finches, blue-tits, thrushes, and starlings. Such a crowd of these we have, all busily feeding, chirping, and alas! squabbling to their hearts' content over the bread, hemp-seed, and other dainties spread before them. The window is left open, and we now seat ourselves only to be further entertained by the squirrels, who glide into the room and coolly go to a cupboard, the fame of which is evidently passed down from father to son, where they leap up and help themselves from a box of nuts, which they well know is always to be found there.

I often wish our Selbornian members could see these pretty sights, and share my pleasure in witnessing them. I write about them that those who reside in the country may learn that if they please, they may have the same enjoyment by throwing out a few Barcelona nuts and some sopped bread regularly every morning. In a year or two the squirrels will probably have become as tame as mine. There is, however, one condition. I keep no dog or cat, for either the one or the other will effectually drive away or kill the squirrels, and it is because there is scarcely a house to be found without barking dogs and prowling cats, that these pretty rodents are so seldom seen enjoying their lives peacefully as they do in this place. I long ago found that I must forego dog and cat pets if I wished to cultivate wild nature, and I am abundantly rewarded for my decision by the pretty scenes which animate my lawns and shrubberies.

ELIZA BRIGHTWEN.

Izaak Walton's Caterpillar.—In *The Compleat Angler*, chap. v. (fourth day), Walton describes very fully a remarkable caterpillar, and also mentions its food-plant and its strange crust-like cocoon, to which he applies the term aurelia. So far as I am aware, his editors have not determined the species he intends, but it seems quite clear that his excellent and graphic description must refer to the larva of the puss-moth (*Dicranura vinula*), which he quite pardonably calls a "butterfly." The description is as follows: "The very colours of caterpillars are, as one has observed, very elegant and beautiful. I shall, for a taste of the rest, describe one of them, which I will, some time the next month, show you feeding on a willow tree, and you shall find him punctually to answer this very description: his lips and mouth somewhat yellow, his eyes black as jet, his fore-head purple, his feet and hinder parts green, his tail two-forked and black, the whole body stained with a kind of red spots, which run along the neck and shoulder-blade, not unlike the form of St. Andrew's cross, or the letter X, made thus cross-wise, and a white line drawn down his back to his tail, all which add much beauty to his whole body. And it is to me observable that at a fixed age this caterpillar gives over to eat, and towards winter comes to be covered over with a strange shell or crust, called an aurelia, and so lives a kind of dead life, without eating, all the winter; and, as others of several kinds turn to be several kinds of flies and vermin the spring following, so this caterpillar then turns to be a painted butterfly."

R. F. TOWNDROW.

A PLEA FOR THE BIRDS.*

Does it never strike you, ladies,
As your plume-trimmed hats you buy,
That for each one of those feathers
Some maimed bird has had to die?
That for every spray-tipped bonnet
That so heedlessly you wear,
In an act of cruel slaughter
In effect you've had a share?

You may plead you didn't know it,
That, by Fashion's laws coerced,
You've unwittingly offended,
Have but thoughtless been at worst;
But, oh, surely when we tell you
What this feather craze implies,
It no longer will find favour
As it now does in your eyes.

When you know that birds are butchered
By the thousand every spring,
Ere as yet their callow young ones
From the nest have taken wing;
When you know those helpless young ones,
Of their mother's care bereft,
To die slowly of starvation,
Are most mercilessly left;

When you know such cruel torture
Must too certainly be borne,
Ere the tufts prescribed by Fashion
Can on your new hats be worn;
Surely, then, you, too, will join us,
Such a practice to deplore,
And will vow, for very pity,
You will feathers wear no more.

It is no great thing we ask you.
For still charming you would be
Though no heron's plume nor osprey's
On your bonnets we could see;
But, indeed, if you continue
Still such plumage to esteem,
What has hitherto been thoughtless
Will intensely heartless seem.

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* It is some time since these lines appeared in *Truth*, but the necessity for the appeal contained in them has not appreciably diminished. We therefore reprint them in the hope that they may attract the attention of a fresh circle of readers, although it may seem like preaching to the already converted.—Ed. *N.N.*

Then your ears, we beg you, ladies,
To this prayer of ours incline,
And forthwith against a fashion
That is barbarous, combine.
Yes, speak out, as you are women,
And the welcome news impart—
Birds no longer shall be butchered
That your bonnets may be smart!

NATURE NOTES FROM NORTHERN TASMANIA.*

IN the bush around the creeks live the brush kangaroo (*Halmaturus Bennettii*), the wallaby (*Halmaturus Billardieri*), the bandicoot (*Penameles obesula*), the native porcupine (*Echidna setosa*), and in forest land bordering on open country the wombat (*Phascolomys Wombat*), while in quiet spots on the rivers one may come upon the renowned platypus (*Ornithorhynchus anatinus*) and the musk rat (*Hydromys chrysogaster*). Upon the great gum trees overhead live "opossums" of two species, the ringtailed (*Pseudochirus Cookii*) and the grey (*Trichosurus vulpecula*), a variety of the last named being the celebrated black or mountain "opossum," whose skins are so greatly in demand for rugs. These dwellers on high may be seen descending the massive trunks as night draws near, to feed upon the richer foliage of the young trees below, while the tigercats (*Dasyurus maculatus*) and the native cats (*D. viverrinus*) also steal out about the same time to see what they can pick up in the hen-roosts of the settlers. In the thick foliage of the gloomy "myrtles" (*Fagus Cunninghami*) live the pretty flying squirrels (*Petaurus breviceps*), the fur of a beautiful soft grey, strongly contrasted by the sharp black line drawn along each side, and by the white fur of the under-surface. As evening approaches these graceful little marsupials take their short flights from tree to tree by means of the parachute-like extension of skin between the fore and hind limbs, or chatter gaily to each other among the evergreen boughs.

Besides these and many smaller quadrupeds, there are hosts of attractive birds and insects to take up our attention in this enchanted land. There is the ground thrush (*Geveichla macrohyncha*), more speckled and spotted than our home thrush and larger too, but a very silent bird withal, hopping swiftly about among the ferns and undergrowth and rustling the dead leaves, but never uttering a note. Of a different stamp are the noisy green parrots (*Platyarcus flaviventris*) among the branches overhead, and the bulky "black jay" (*Strepera fuliginosa*) making the

* Continued from *N.N.*, 1896, p. 186.

"myrtle"-clad sides of the gully resound with his harsh ka-ka! ka-ka! mingled with which may be heard the peculiarly mournful scream of the black cockatoo (*Calyptorhynchus xanthonotus*), as a flock of these fine handsome birds comes winging slowly along between the massive trunks, on the look-out for a specimen in that particular stage of decay when it may be most advantageously for grubs by the powerful hooked beaks of the "cockies." Early in the morning and late in the evening in the vicinity of settlement, for it loves not solitude, may be heard the rich, flute-like pipings of the "magpie" or piping-crow shrike (*Gymnorhina hyperleuca*), a favourite with us, and everywhere protected. At early morn the hillsides resound with the merry laughter of the jackass (*Cracticus cinereus*), a smaller bird and belonging to a different family to that of the redoubtable snake killer of the Australian continent (*Dacelo gigas*), but still vastly entertaining to a new comer.

The group of flame-breasted robins is well represented, no less than five being enumerated, among which the one most frequently met with is the superb warbler (*Malurus Gouldi*); the male of this species being decorated with bright blue patches on the head, back, and wings, while the hen is of a sober grey hue. Closely allied to these are the familiar little fantail flycatchers (*Rhipidura saturata*) everywhere met with, and which charm as much by their perfect confidence in us as by their graceful aërial evolutions in pursuit of nimble insects. It will thus be seen that a happy hunting-ground lies all around, well stocked with such game as is pleasing to the eye of the naturalist, and that without wandering more than half a mile from his dwelling—itself a rough product of bush material and bush hands—he can encounter enough strong and interesting forms of life to provide years of study.

Surely amid such surroundings plain notes and short observations freshly jotted down on any points which have come under notice during our walks or rides, or while at work among the trees with axe and saw, should not be entirely devoid of interest to the nature lover in whatever country he may happen to be situated.

August 27, 1896.—A new bird was seen to come out of the thicket of dogwood scrub (*Pomaderris apetala*) which adjoins one side of the clearing, and to perch on the top rail of the rough fence. This bird was marked somewhat like the ground thrush, but only about half the size of the latter, and while sitting on the fence uttered several loud clear piping notes. It was quite possibly one of the honeyeaters, of which there are several species here in the summer, among them being migrants from the mainland of Australia.

August 28.—Noticed a remarkable little bird outside a cottage half a mile away (my nearest neighbours), where it was hopping about quite familiarly among the logs of firewood strewn about on the ground, picking up any choice little morsels which its

keen eye detected. The long upright tail was formed of such fine feathers that it looked unsubstantial, like a tiny streak of mist. This diminutive visitor was most likely the emu-wren (*Stipiturus malachurus*), very rarely seen in this district.

August 30.—During the last four days the wind has been blowing very strongly from the same quarter—the east, off the sea—Bass's Straits, about three miles away. This strong easterly wind was accompanied by occasional drizzling showers; this afternoon there was a shift to the north, with fine weather at first, then heavy rains. The north is our rainy quarter in this colony.

September 6.—The first cuckoo of the season was heard to-day, this being our first spring month. This bird has not the English cuck-oo, but utters a series of rippling notes, like clear running water, which sound delightful when heard early on a bright spring morning. The typical cuck-oo note is represented in this species by a sort of double whistle, to which it occasionally gives utterance. It is curious to note how common these two whistling notes are among our birds in the breeding season. The dusky robin (*Petræca vittata*) and the quail (*Synoicus diemenensis*) both possess it, with this difference, that in the former the first note is pitched high, the second much lower, while in the quail's call the reverse takes place. The whistle uttered by the cuckoo when sitting contentedly on a fence or stump is very soft and plaintive as it falls on the ear, affecting one quite differently to the series of bright rippling notes previously mentioned. This cuckoo is not shy, like the English bird, but will come and sit on the garden fence and whistle away quite fearlessly. When it alights on a stump or post it does not continue standing, but sits closely down so that its legs are quite concealed, and then begins its note. There are five cuckoos known in Tasmania, all of which come in the spring and go across the Straits again in the autumn to winter in the warmer portions of Australia. The species whose habits we have been noting (*Cuculus flabelliformis*) is always the first to appear here, and comes in considerable numbers, so that in a day or two after the first has been heard, the bush is quite musical with their trillings. It is smaller than the British cuckoo, but there is a species (*C. pallidus*) much larger, which frequents open country, and especially the plains near Table Cape township. It flies from tree to tree with a graceful, undulating motion, and makes the plains resound with its strong, rich voice, given out in a series of notes which gradually rise in pitch and intensity until they reach the climax, where they abruptly cease. This interesting bird appears to resemble in its habits the hawk cuckoo (*Hierococcyx varius*) of India. Professor Rymer Jones, in speaking of the latter, talks of its "loud crescendo notes, which somewhat resemble pipeeha! pipeehi! repeated several times, each time in a higher tone than the last, until they become exceedingly loud and shrill," which describes pretty accurately the voice of our large species.

The sassafras tree and the native pepper tree are now in flower, as are also the gum trees. The sassafras is a tall handsome evergreen tree of a somewhat pyramidal shape, with large glossy serrated leaves; it prefers a moist situation, such as the banks of a stream. When flowering the tree is exceptionally beautiful, being covered with open white blossoms like shallow cups, with pink centres. Many of these trees flower in July and August, before winter is over, and coming thus at a time when flowers are scarce, they are very acceptable for decorating, both foliage and blossoms being very ornamental. Both the bark and leaves are strongly aromatic, giving, like the musk-tree (*Aster argophyllus*), a delicious scent to the humid atmosphere in which they luxuriate. The bark is used by bush housewives for making a tonic beer, while the leaves are often put into a "billy" (the bush teapot, a circular tin can with handle) thus imparting an aromatic flavour to the brew of tea. This property is often made use of by those unfortunates like myself who spend part of their lives outside the radius of cow's milk, for which the flavour imparted by the leaf is a sort of substitute.

The pepper tree is much smaller than the sassafras and more shrubby in its growth; it is, nevertheless, rather a handsome little tree, the bark and twigs being of a bright red hue, while the leaves are long and glossy. These latter have a very hot taste when bitten through. The flowers are small and white, easily falling when touched; the black berries which follow are, when dried and ground, superior to ordinary pepper for table use, having an agreeable spicy flavour.

September 11.—Found a curious miniature forest on the upper surface of the leaf of a stringy bark sapling, upon and around a portion of which the upper layer of tissue had been eaten away, and a mass of small uprights of vegetable fibre erected, standing thickly together. Some yellow mites were seen on the eaten portion, but their presence was probably accidental, the work being most likely that of a small lepidopterous larva living in a silken tunnel alongside.

On the leaves of these saplings a scale insect is also frequently seen, a small roundish red insect covered with a dull yellow coating, except at the part where it adheres to the ribs of the leaf. This coccid turned out to be eriococcus coriaceus. Numbers of small ants are running rapidly up and down the saplings, in all probability obtaining sustenance from the coccids in the shape of honey dew.

September 13.—The Australian swallow (*Hirundo neoxena*), corresponding to the English house-martin, arrives, a pretty little bird, very fearless, and a general favourite. The head and back are dark blue, throat and chest brownish red, abdomen white. On the township they build mud nests under the eaves of the houses; when away from dwellings, which are somewhat sparse hereabouts, they make use of holes in the trunks of the big eucalypti for nesting. One pair build every year under the

little wooden bridge which spans the Black-fish Creek, over which bridge we must go to reach the township. The jarring of horse's hoofs and cart wheels does not seem to affect the little birds, as the spot is selected each season. It is very pretty to see the dainty little things sailing backwards and forwards over the swiftly running brook, sometimes catching gnats, sometimes each with a white feather in the beak to add to the soft lining of the nest.

September 13.—The summer bird (*Graucalus parvirostris*) now arrives. This is a well-known bird on bush-clearings, where it flits with graceful undulatory motion from stump to stump and from tree to tree. It is about the size of a thrush, the form light and graceful, the plumage of a beautiful bluish-grey, setting off the dark feathers about the head. A curious note is uttered by these birds, a very rapid note somewhat like the noise made by the toy birds on small platforms which children draw along the ground. The summer bird loves to frequent the tops of the tall eucalyptus trees, where among the drooping foliage it discovers the larvæ and other soft insects which form its diet.

September 14.—The black larvæ of a large moth now appear on the leaves of young gum trees. These caterpillars are of a heavy, ungainly build, and attain a large size before entering the pupal state. When young they are always seen in groups upon the large leaves of the gum saplings, and often arrange themselves in a circle with their heads pointing towards the centre. When disturbed they protect themselves in the following ludicrous fashion, viz., by exuding a viscid yellow substance from the mouth and at the same moment bending their tails over their backs until they touch the substance at the mouth, by this means bedaubing both extremities with it. It is an extraordinary sight to watch a large leaf covered with these thick, black ungainly creatures, all in quick motion, going through the gymnastic exercise just described and bedaubing themselves with the sticky strong-smelling secretion, which is, doubtless, intended as a protection against their numerous enemies, such as the summer bird lately noted. These caterpillars are very conspicuous on account of their large size and habit of grouping themselves together upon a single leaf or twig, so that some special protective faculty is needed to give them a fair chance in the struggle for existence.

September 28.—The gum saplings are full of all sorts of interesting creatures waiting to be observed: for instance, two of the leaves were found cemented together, and on opening them carefully, a small brown caterpillar was found within, which had constructed a neat circular fortress between the two leaf surfaces.

On the gum leaves is occasionally to be seen a semi-transparent, greenish, very flat little insect, which runs sideways with amazing swiftness, and always manages to slip to the under side of the leaf when observed. A brightly-mottled black and yellow spider constructs a large nest on gum leaves; a brown spider

was found sitting on a bundle of eggs, as if incubating them, and a queer little dark-brown crab-like spider is often brought under our notice from the neat little tents which it makes by pulling over and tying down the end of a gum leaf, and then lying snugly ensconced in the apex.

October 10.—It is now real spring-time with us; the swamp tea tree (*Melaleuca ericifolia*) bears its brushes of very pale-yellow bloom; the sundew (*Drosera*) sends up its single stem of small whitish pink-tinted flowers, large compared with the size of the plant. On the healthy plains many orchids may now be found in flower, such as the spider-orchid (*Caladenia Patersonii*), a bright blue one (*Caladenia barbata*), the helmet orchids (*Pterostylis squamata* and *cucullata*), and the dragon-orchid (*Diuris sulphurea*).

Among the spring-birds, the smaller cuckoo (*Cuculus flabelliformis*) now utters its pleasant rippling note the livelong day, while its larger relative, the pallid cuckoo (*C. pallidus*) calls with increasing vehemence among the boughs of the peppermint gum which sprinkle the open plains. To-day the interesting discovery of a nest of the speckled ground-thrush was made in the fork of a large dogwood tree, about ten feet from the ground. Until now I was under the impression that these large and rather shy birds always built on the ground. The nest is a large structure, beautifully round, and composed of fibres plucked from the stems of tree-ferns and mosses. It contains two rather large eggs, blotched all over with dark red. Some of the dusky robins (*Petræca vittata*), also called "native sparrows," have already fledged young with them, showing that they must have begun nesting very early, indeed, before the commencement of spring.

Table Cape. H. Stuart Dove.

THE FALL OF THE ROOKERY.

FOR centuries the branching elm-tops had swung to and fro as the west winds swept down from the long line of blue mountains that bounded the horizon of the setting sun. Spring after spring the passers-by, casual and regular, had looked up from the broad gravel walks below, and had noted with pleasure the cawing tumultuous throng; and as the days grew warmer and the sun sank farther to the north, the young rooks had grown used to the chatter and laughter of the children that played under the shadow of the stately trees, running races across the sward, playing hide and seek round the huge trunks, or sitting in groups in the lush grass, threading daisy chains and chanting songs.

There had been disasters at rare intervals. Now and again in the wild gales of March and autumn great limbs had been

torn off and had come crashing to the ground, ploughing up the turf in their heavy fall; and in the last decade the rooks had seen ladders reared and men with saws and axes lop here a branch and there a branch, or with complicated girths of chain and iron rope secure a doubtful bough to the main stem. But the waving topmost branches where the birds built had for the most part been left untouched by winds and men alike, and every year the black nests of the rookery appeared among the feathery twigs and the ceaseless cawing heralded the return of spring to many a winter-weary heart.

But there came a day when to the city fathers in council assembled was put a motion for demolishing the rookery. Experts had pronounced the trees to be dangerous. But a summer or two since in the still noon of a July day, a giant bough, weighted with its full foliage, had fallen without warning to the ground, dealing death, alas, to two children who, all unsuspicious of danger, played in the grass beneath; and then many of us had learnt for the first time that in our English elm, that divides a nation's affection with the oak, there lurks an ever-present danger, a danger no less to be feared when the leaves rustle thickly in summer on the full-grown tree than in the tearing gales of the equinox. The precautionary supports of bands and chains were now declared to be insufficient protection, and the old trees were saved from root and branch destruction only by a resolution in favour of pollarding. And so for pollarding the order went forth, but no one told the birds.

February belied altogether its proverbial cognomen of "fill-dike;" mild April-like days, with a few sharp frosts filled up the brief month. And long before the coming of March the rooks assembled in their conclave, fluttering, soaring and circling above and around the old trees, descending to the grass below and again rising when disturbed, with clamourous indignation, to the safety of the elm tops, all unconscious of the doom of their ancestral homes.

Even when the work of devastation began, and the gang of destroyers with their tall ladders, their axes and hatchets, worked steadily on from tree to tree leaving lopped and unsightly trunks in their wake, the birds still fluttered and cawed at the farther end of the line of trees. As the ruthless band came nearer and yet nearer, and the groaning cry of the splitting and rending wood—the cry of a living thing to anyone that has ears to hear—was followed by the loud crash of the falling limb as it toppled to the ground, the rooks rose, cawing loud alarm, from the trees, to wheel for some minutes in the air and finally settle again.

When the attack had reached the last tree, when the ladders were planted and the fellers, axes in hand, had ascended, the birds who had taken a last stand here as if loth to believe that one refuge would not be spared to them, rose and took wing, sailing away, a black cloud in the blue sky, to where they might find a new and securer home.

And now the last bough is down, the crash of falling timber has ceased, with the grinding sweep of the saw and the blow of the hatchet. The last load of "big sticks" has creaked out into the road and away to the timber yard; the smaller branches and twigs on which the buds are already bursting have been gathered up for faggots. The contractor's work is done and his men have gone on to the next "job." Nervous people can breathe in peace, their fears of a "bolt from the blue" removed. But though the pollarded trunks will shoot out twigs and small branches and thus hide their bare wounds from view, and though the small songsters of the grove will find ample shelter left for them, the rooks have gone for ever. No more will they and their nests show black in the branches in early March—the branches are gone; we shall not hear the fluttering of their wings in leafy May and June, and throughout the year there will be a note lacking in the morning chorus which greets the passer-by, and a void in the hearts of many a one who loved the old rookery and its denizens—a void to be filled up by no prudential considerations.

ARTHUR O. COOKE.

SELBORNIANA.

The Torquay Golf Links.—In former numbers of NATURE NOTES, you have raised your voice against the destruction of all the wide elements of beauty in our commons and open spaces by golf players for their own convenience; that destruction still continues in many of the most lovely pieces of open country that are still free to all for enjoyment, and not merely the privilege of a few. Of late years the extensive downs reaching from Babbicombe Glen to the cliffs above Anstey's Cove have been utilized by golf players, and the change is grievous to all lovers of nature; the fine short turf is hacked about, cut up and injured by unskilful players, its fresh beauty destroyed by being everywhere trampled over, and the rare wild flowers, wild thyme, vernal squill, &c., that used to come up in the mossy turf, are killed. In order not to lose the balls so often, the beautiful clumps of wild gorse that added so much variety are burnt down, and only blackened ruins remain over hundreds of square yards. Then inequalities of the ground are removed, and smooth places rolled to make a convenient finish. Thus by degrees the delightful look of wild nature so dear to artists and people of taste is utterly taken away from these downs, the choicest open space that beautiful Torquay has. Before leaving Torquay, I should like to say a word about the cruel lopping of the branches, and the cutting off the tops of the trees that line the road from Torquay to Babbicombe, while some of the householders at Babbicombe, notably near All Saints' Church, have reduced their trees to mere stumps—utterly regardless of the beauty that God intended all trees to have. To return to golf spoliation, a friend writes to me from Crowborough, Sussex:—"The Common here is to me completely spoilt by the golf links. The heather is kept close, so that we get no purple tints over it, and the turf is cut up in places to make level squares, and small ditches are dug to drain the water off, so I scarcely ever go there now, being disgusted with the desolation."

A LOVER OF NATURE.

NATURAL HISTORY NOTES AND QUERIES.

What would he do with it? (p. 78).—The rat with the small roach in its mouth was most probably the brown rat, and not the water rat, or to speak more correctly, the water vole. The former is common enough on the banks of streams and ponds, and will devour almost anything it can come across. Naturalists are now, I believe, thoroughly satisfied that the water vole, like its smaller congeners of the bank and the field, is exclusively a vegetable feeder.

Fyfield, Abingdon. W. H. Warner.

Great Northern Diver (p. 78).—I cannot presume to say for certain whether the great northern diver breeds on the Scotch mainland. But I have been much in the North West Highlands, especially in Sutherlandshire, having spent seventeen or eighteen summer holidays there; and I have frequently seen the northern diver there—in the month of August generally. An innkeeper gave me (in 1876 or thereabouts) a pair of eggs, supposed of the black-throated diver. I gave them to my brother, who was rather doubtful to which of the two species they belonged. These eggs are still at Rev. G. C. Green's, Modbury, Ivy Bridge, Devon. It is most probable that they are of the black-throated, which I have often seen on the Sutherland mountain lochs. Once I saw a pair of young birds on a tiny mountain tarn, almost fully grown; they did not fly (though the old bird flew away at once), but continued diving in full view for quite half an hour. But if the Great Northern never breeds, why is it about the coast in summer, and about the hill lochs? for I have seen them there.

Hepworth Rectory, Diss. W. C. Green.

The presence of the great northern diver on various parts of the coast of Great Britain has frequently been remarked upon. But this fact does not of itself afford the slightest evidence that the birds intended to breed in those localities, or anywhere near them. For instance, adult examples have been observed and obtained so far south as Devonshire in May, June and September (vide *Birds of Devon*, p. 411). The late Mr. R. Gray stated that this diver was abundant in the Outer Hebrides at all seasons of the year except July, and that a few remained in Benbecula all the summer; he adds, on the information of Dr. Scouler, that by the end of August those birds which left for a time were back again accompanied by their young ones (vide *Yarrell*, 4th ed.).

The generally accepted *opinion*, nevertheless, is that the great northern diver has bred in the Shetlands (as recorded by Saxby) in times past, and that it will do so again; while that a pair observed in June, 1868, in Sutherlandshire were actually breeding. *But* hitherto the fact of the great northern diver having bred in any part of the British Isles *has never been proved.* To say, therefore, that this species breeds in the north of Scotland is, in the present state of our knowledge of the subject, an inaccuracy.

O. V. Aplin.

London Birds.—As Mr. Macpherson remarks (page 46), the London thrushes frequently both begin and end the year with song, and indeed are seldom altogether silent for very long; I have heard them more or less during every month of the year. The London blackbirds, however, so far as my observations go, are usually some two or three weeks behind their country brethren. These generally begin to sing early in February, but of late years I have seldom heard our town representatives in full song before the beginning of March, and sometimes even later. The chiff-chaff, blackcap, common and lesser whitethroat, willow, sedge, reed and garden warblers, all made more or less prolonged visits to Battersea Park during the spring and summer of 1896. The reed warbler, as usual, had several nests, and a writer in the *Field* (October 31, 1896) gives the common whitethroat as another nesting species. This in itself is not remarkable, but the writer goes on to say, bringing forward some of the park officials as his authorities, that a pair of whitethroats, in 1895, hatched and reared a young cuckoo in a clump of dwarf bamboos. If authentic, and the evidence given seems very conclusive, the incident is very noteworthy, as the cuckoo is not a very frequent visitor to Battersea. The same writer also records the visit of two pairs of king-

fishers, which he said had then haunted the lake for some time. His conjecture that they might have bred there, in my opinion may be dismissed at once as out of the question. I myself caught sight of one on the morning of October 18, 1896, and another *Field* correspondent records seeing one while passing the Battersea reservoirs in a railway carriage. Even in winter, when the majority of lesser grebes leave St. James's Park, one or two individuals—probably young birds—stay behind, and the pair which persistently haunted Battersea Park all last summer remained for the winter, or at least paid such frequent visits that it amounted to the same thing. By next summer I hope the lesser grebe will have bred at Battersea. Several times during October I had the pleasure of watching the grey wagtail, once in St. James's, and two or three times by the river shore outside Battersea Park. This extent of mud, shingle and stones, when left uncovered by the tide, is a pretty sure find for a meadow pipit or pied wagtail in winter. It also proves attractive to many other birds besides: carrion crows, rooks, starlings, chaffinches, an occasional pigeon, scores of sparrows, and in hard weather the thrush tribe, all patronise it as a feeding ground. Latterly a pair of wild ducks—deserters from one of the parks—have taken up their quarters between bridges, and are frequently to be seen on this tract of foreshore.

W. N. Rushen.

London Magpies.—The magpies in Regent's Park, according to my informant (a friendly keeper), were turned out some time ago by one of the higher park officials, and are consequently not genuine wild birds. I think it doubtful whether any but escaped or semi-domesticated birds of this kind ever take up their quarters for any length of time within the metropolitan area. The magpies generally to be seen in St. James's Park have been about there now for several years; the original bird appeared of his own accord, and finding the place to his liking has stayed on as a permanent ornament to the park ever since. Sometimes he is joined by a compatriot or two, but Mr. Riley, the duck-keeper, considers one magpie quite enough at a time. Over and over again he has seen the vagabond busy robbing the wood pigeons' nests, and he has numberless other ways of making himself objectionable. I believe, however, that one summer a hand-reared hen was turned out for his benefit, but the experiment was not a success. The tame one generally preferred sitting on the back of a seat with an admiring crowd of small boys about her, while its companion has always been far too wary to come within reach of a human being. The carrion crow, rook, jackdaw and jay are all quite common in and about London, but the magpie, as a genuine wild bird, is undoubtedly very rare.

W. Naunton Rushen.

*** A number of articles, notices of books, and other communications, are unavoidably held over from want of space.

RULES FOR CONTRIBUTORS AND CORRESPONDENTS.

1. All communications for Nature Notes must be authenticated with name and address, not necessarily for publication.

2. The return of unaccepted contributions cannot be guaranteed. We cannot undertake to name specimens privately, or to return them.

3. All communications for the May number must be in the Editor's hands by the 10th of April.

4. Communications for Nature Notes should be addressed to the Editor, James Britten, F.L.S., 126, Kennington Park Road, London, S.E., as should specimens for naming, books for review, &c. The Editor cannot undertake to reply privately to questions.

5. Letters connected with the Selborne Society, as well as all inquiries as to the supply of Nature Notes, and subscriptions, should be addressed to the Secretary of the Selborne Society, A. J. Western, Esq., 20, Hanover Square, W.

6. The Editor is not responsible for the contents of the last page of each number: communications respecting that page must be addressed to Mr. Western, as above.

SELBORNE SOCIETY NOTICES.

Annual Meeting and Conversazione.—The Conversazione, as previously announced, has been fixed for Thursday, May 20, from 7.30 to 10.30, at the Society's Rooms, 20, Hanover Square, W. The meeting will commence at 8. Sir John Lubbock will deliver the Presidential Address, and will be supported by Mrs. Brightwen, the Earl of Stamford, Canon Wilberforce, the Hon. J. Scott-Montague, M.P., and others. Music, tea and coffee. A ticket of admission is sent with each copy of NATURE NOTES this month to all members of the Selborne Society. It is particularly requested that those intending to be present will fill in their names in the blank space, and also that Hon. Secs. of Branches who attend will take steps to make themselves known to the Secretary or Members of the Council.

Field Club Saturday Rambles :—

May 8.—Meet at Sanderstead at 3.9. Victoria, 2.35; East Croydon, 3 (London Bridge, 2.25; East Croydon, 2.52; where change and enter train from Victoria). Walk to Sanderstead Church, and across Riddlesdown to Caterham Valley. Tea at Kenley. Guide, Mr. Martin.

May 15.—Meet at Hanwell Station about 3.15; Paddington, 2.50; Ealing Broadway (G.W.R.), 3.1; Broad Street, 2.20; Willesden, 2.52. Take route through Greenford through the fields to Northolt. Tea at the Inn opposite the Church, Northolt. Guide, Mr. Ravenshaw.

May 22.—Leave Chingford on arrival of 2.34 train from Liverpool Street (Clapton 2.45). Thence *viâ* Bury Wood and Sewardstone Green to Highbeach. Tea at Robin Hood about 5. Return day ticket, Liverpool Street, 1s.; Clapton, 8d. Guide, Mr. C. Nicholson.

May 29.—Leave Swanley Junction on arrival of 2.37 train from Holborn Viaduct (Victoria 2.42, L.C. and D.R.). Visit Bee Farm, Farningham, thence through village and on to Eynsford. Single ticket to Swanley Junction, 1s. 5½d. Guide, Mr. Brice, Hon. Sec. Kent Beekeepers' Association.

Council and Committee Meetings.—The next meetings of the Council will be held on Tuesdays, May 4, and June 1, at 5.30; of the Magazine and Leaflet Committee on May 18 and June 15 at 5.30; and of the Field Club Committee on May 4, after the Council Meeting.

NEWS FROM THE BRANCHES.

Abinger and Shere.—A ramble will be conducted by Professor Boulger on Saturday, May 29, starting from Gomshall station at 3 o'clock. Mrs. Baker, of Kingswood Hanger, Gomshall, Guildford, kindly invites any members of the Selborne Society who wish to join the walk, to tea at her house at 5 o'clock, and she would be obliged if members who propose to avail themselves of her invitation would let her know a week beforehand of their intention.

Croydon and Norwood.—The Annual Meeting of the local Selborne Society took place, by kind invitation of Mrs. E. Phillips, at Vaughan House, Moreland Road, on Wednesday evening last. Colonel Wild occupied the chair. The Report and Balance Sheet for 1896 was presented and adopted. Regret was expressed that, at present, the opening of the closed piece of land in the Stroud Green Road had not been taken in hand by the Roads Committee of the County Council. It was hoped that the matter would not be allowed to drop. The rules were read and adopted. The officers for the ensuing year were elected as follows: Mrs. E. Phillips, Rev. F. E. J. Bird, W. H. Bishop, Esq., J.P., Rev. John Wills, W. T. Harden, Esq., Vice-Presidents; Committee: Messrs. E. S. Adeney, W. H. Coldwells, A. L. Curtis, Miss L. McNaught, Miss Musslewhite, Messrs. H. W. Perry, J. Petrie, Mrs. Braham Pitt, Messrs. J. T. Rawlings, W. J. L. Smith; Delegate: Mr. Frederick Downing; Hon. Secretary and Treasurer: Mr. E. A. Martin, F.G.S. Discussion ensued as to the best means of carrying out the objects of the Society. The usual votes of thanks closed the meeting.

EDWARD A. MARTIN, F.G.S.
Hon. Sec. Magazine and Leaflet Committee.

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A VISIT TO SELBORNE.

IT was a bright day in late September when I set out for the village of Gilbert White. It seemed to me, a pilgrim, impossible to approach the spot except on foot, and I chose the way which would lead me through the most of the country mentioned in the *Natural History*. We are told in the book that Selborne is near midway between the towns of Alton and Petersfield. Both these places are now furnished with a railway station, but I noticed that Liphook, on the London and Portsmouth line, lies just on the eastern skirts of Wolmer Forest, and that from these an eight or ten miles walk would take me through the heart of this ancient royal demesne to the village of my desire.

Thus, on stepping out of the train, I at once entered classic ground; for it was here "near the great road of Lippock" that Queen Anne, "reposing herself on a bank smoothed for that purpose, saw with great complacency and satisfaction the whole herd of red deer brought by the keepers along the vale before her."

Lippock, as it is still called, has other reminiscences of royalty. It was an important stage on the Portsmouth Road, and its ancient hostelry was much beloved by the Sailor King. Samuel Pepys also tells us how the Anchor once received him, with wife and maid Deb, fresh from the perils of the wild roads of Hind Head on a dark August night. It was pleasant to see the old inn, after entertaining these generations of travellers, still throwing wide its hospitable doors and offering the shade of its great chestnut tree and the delights of its garden to the lover of rural scenery and comfortable old-fashioned ways.

The way westward lay at first through level sandy roads embowered in great hedges of hazel whose mounds stand high; they offer you nuts and blackberries to your heart's content, but

quite refuse a peep at the country beyond. Soon, however, we reach opener and more uneven ground and, crossing a common deep in furze, enter a wood of oaks and holly. Here, by notice-board, the Lord of the Manor warns us not to encamp, or to cut hollies or underwood, and, by merely suggesting to us these freedoms, shows us that we are in a district where the land is not too severely appropriated.

It is at Hollywater that the Forest really begins. This is a tiny hamlet by a pond, yet boasting an ale-house yclept the Oak-tree Inn. But we have now almost reached the limit of clay-loving oaks and holly. White tells us that "Wolmer is nothing but a hungry sandy barren waste;" and indeed the natural vegetation is that of a southern heath, ling, heather, bilberry and bracken, the whole land being open to the wind and sky. Such a range, undisturbed by agriculture, or wood-craft, or any arts of man, is what the red deer loves. He seeks a wide, free, open country with covert only in the gullies and dingles, and such was Wolmer Forest in the olden time when it was first set apart as a royal hunting ground. This poor soil will not nourish the trees of the surrounding woodlands, and acorns and hazel-nuts are dropped on it in vain, but during the last half century great plantations of Scotch fir have been made and these have thriven exceedingly. These woods have quite changed the natural aspect of this great waste; but there are still wide tracts of native heath which amply preserve the flora and fauna, and I cannot but think that these vast groves of our beautiful indigenous fir have given an additional charm to this moorland, as they have certainly increased its wealth. They yield timber whilst preparing the soil for agriculture. The deer were gone before White's time, to his great regret; but I think he would hardly lament this further change. Among the red trunks and blue-green foliage I wandered, encountering with joy the green woodpecker, until on ascending a slope, I found Wolmer Pond below me. The view was extensive and varied. I was now on the verge of the forest, and looking on the uplands to the north-west, hill and wood were mingled in charming confusion. A down with hanging woods abounded the horizon, and beneath it I could note the hollow, from which a faint smoke was arising, where Selborne nestled.

Wolmer Pond since White's time has been shorn of much of its glory. It is no longer a secluded spot. An ugly road now runs alongside it and houses have been built. Moreover, through some misadventure in draining or delving, it has lost half its waters and is now a very shallow mere, almost drying up in hot summers. The fish are gone and the water-fowl, yet a great flock of lapwings were feeding on the oozy shores, and the east bank, which rises into a little cliff of hardened sand, still houses a large colony of the smallest of White's beloved *hirundines*. Beyond this little cliff the ground still swells until it forms a considerable knoll in the moorland, and here a green mound

shows that some Hampshire man of long ago loved this spot and chose it for his last resting-place.

From Hollywater I had passed only over foot-tracks and by-paths, the inhabitants assuring me that I should never find the way, and now I persuaded a reluctant postman to start me on another field-path leading to the higher ground, this also being impossible to any but a native. The forest lies quite below Selborne and the way ascends through a region of little streams suited to sticklebacks, of green wooded lanes with banks and mounds of briars and brambles, of pastures and meadows of most irregular shape and size enclosed by fantastic hedgerows, with here and there a stubble field and a plot of turnips or a hop garden. Here the game had the upper hand; the pheasants seemed to inhabit the country. They resented greatly the disturbing of them in their feast on the fallen acorns, and at one point I almost thought they were going to dispute the passage, while the jays in the trees above screamed defiance.

Coming out through the woodlands of the slope to the high ground, I found myself in the zone of the hop gardens. There was a kiln hard by where a species of locomotive engine was conducting the drying operations. I essayed to view them, but was driven back by the fumes of brimstone. Not familiar with the cultures of a southern country, I was inquisitive on the subject of hops, and the attendant of the rumbling monster, contentedly eating cold plum pudding, sausage-wise, with the aid of his pocket-knife, was there to satisfy my curiosity. "Was the sulphur used to bleach the hops?" "No, to make them bright and a good colour." "What colour ought they to be?" "Why, we can make them almost any colour they want." On this I resolved to pry no further into the matter, fearful lest my belief in genuine malt and hops should be shattered, for if our pleasant illusions are to be destroyed, how little will remain to us!

I was now rather above the level of Selborne, and had just gained the high road thitherward, but I thought there would be yet a footpath, nor was I mistaken. I was to go along the road until I came to a gate in front of me; there, through a turnip-field, was a track direct to Selborne. "Is the gate to the right or the left?" "Neither, straight in front." "The gate is across the road then?" "No, it is straight before you—the road twines there to your left." It is in vain that you would make a country man speak out of his own tongue. This track led through the turnips to a stubble and began to descend; then I had my first view of Selborne, "one single straggling street, three-quarters of a mile in length, running parallel with the Hanger."

It is little altered since White's time. Perhaps there are a few more houses, and some have been partly rebuilt or enlarged; but the sites, and the gardens and enclosures remain the same. It is true that the population of the whole parish has nearly

doubled during the last century, but the increase has been chiefly about Blackmoor, on the borders of the forest, where Lord Selborne lately established himself, and built a large house and a noble church. A few new houses there are about Selborne, but the village itself is little changed.

I went down one of the deep lanes—for from every side the roads descend into the village—and crossing the rivulet which takes its rise at the base of Nore Hill, made my way to the comfortable little inn where so many lovers of the gentle Gilbert have lodged. On the stairs to my room was a bust of Ray and a stuffed fern owl.

The Wakes—the home of Gilbert White—has not now much attraction for the pilgrim to Selborne. It has been enlarged and much altered; yet the garden and the beautiful site remain. The house faces the street and comes close up to it, but from the other side it looks over a pretty garden and some twenty acres of meadow and pasture with large trees—a space of perhaps 500 yards—straight to the steep beech woods of the Hanger. On the other side of the street is the Plestor or village-green, where stood the "vast oak, overturned by the amazing tempest of 1703." A thrifty sycamore now occupies its place. Beyond the green is the church, a stout irregular pile, Norman and early English, with massive heavily-buttressed tower, aisles of unequal size and a single transept. The old yew-tree still stands and is likely to stand for centuries.

While the light yet lasted I hastened to mount the Hanger by the steep chalk path, now slippery with much rain. Once through the beech woods, you enter on an almost level plain which is the top of the down, but this is not the bare sheep walk which I, forgetting White's description of it as "a pleasing, park-like spot," had pictured to myself, but a most charming combination of tangled shrubberies, bright with many coloured fruits, enclosing spacious lawns of freshest green, of clumps of fine beeches luxuriating in their native chalk, and of thick coppice of smaller trees. Here are masses of bracken, waist-deep, gay with their autumn tints, hawthorns crimson with fruit are canopied with snowy clematis and hung about with honeysuckle; the brambles and the bower roses make an arching and rounded tangle, impossible to penetrate yet most sweet to look upon, a safe refuge to every bird and beast that seeks its covert. The summit of the down is not all level plain either, for here and there it slopes down to the woods in little dells and hollows where wood and coppice meet. It would be idle by any attempt of art to endeavour to rival this wild garden of nature. From this height the distant views are very pleasing. The village itself and its wooded stream are hidden by the trees, but to the south and to the west the Hampshire hills succeed each other in curved outlines, while away to the east the eye travels over the low-lying forest to the bold promontory of Hind Head, where the North Downs of Surrey and the South Downs of

Sussex join and commingle. The twilight gathered about me as I was on the hill, and it was already dark among the beeches as I hastened down the steep path.

Gilbert White says that "the village lies one stage or step from the uplands in the hill country at the spring heads." It is just below the level of the springs which here issue at the foot of the chalk and form the head waters of the river Wey. A stream is thrown out at each end of the Hanger, and so on either side of Selborne, and the two flow round it, so as to half encircle it, until they join their waters a field's length below the church. These rivulets by the fret of ages have hollowed their channels and formed little valleys; thus the village, having set its back against the Down, is enclosed by them in front as by a moat, and so lies entrenched.

> "High on a mound th' exalted gardens stand,
> Beneath, deep valleys, scooped by Nature's hand.
> A Cobham here, exulting in his art
> Might blend the general's with the gardener's part,
> Might fortify with all the martial trade
> Of rampart, bastion, fosse, and palisade,
> Might plant the mortar with wide threat'ning bore,
> Or bid the mimic cannon seem to roar."

This picturesque situation is especially observed near the church, which stands on a green knoll just above the waters' meeting. The combined stream continues its way for more than a mile through a narrow vale with steep well-wooded sides, flowing through hillocky pastures, until at the site of the ancient Priory, now occupied by a farmhouse, it reaches more open country.

It was down this valley that I took my next walk. The way is through the churchyard. Here lies with his fathers the scholarly, unambitious gentleman who has made the name of an obscure village immortal by his love of its simple sights and scenes. "G. W., June 26th, 1793" is all the inscription of that little head-stone.

The path-way descends the green knoll to the point where the waters meet. This is the Short Lith; the Long Lith is the field on the other side of the stream to the north, the cottage at the foot of the hill is Dorton. I went through a lovely wood of oak and beech in which jays and wood-pigeons abounded, feasting on the ripening mast; but it is the variety of underwood which most attracts attention, the nut-trees, briars and brambles, all full of ripe fruit, the dogwood with its black berries, the spindle-tree opening pink pods to show seeds enclosed in mace of brightest orange, the guelder rose with bronzing leaves and luscious over-ripe berries, transparent as drops of rosy syrup, the elder, its large cymes once so erect in flower now hanging heavy with purple fruit. What treasures do we find here!

At the Priory I crossed the stream and turned up through the woods which clothe its other bank. This is a place in

which it is impossible to find the way, so many are the seductive paths which lead one astray. I came to a divided track. The other is so enchanting that I must explore it, yet how leave this delightful path; I will go a little way and will return; I will make a circuit. So I ascend a steep bank through the tangle and find myself in a turnip field—this to my great surprise, for at the moment in these wilds I had been unconscious of man's dominion. But this turnip field is so charming that I cannot leave it. It is the flat top of a down, defended on three sides by the steep slopes of the woods—a sight for a camp—and these woods are a wild fruit garden. What an extraordinary abundance does Nature supply to her children! The provision of man for his wants in the cultivated ground seems small beside this harvest of wood and coppice. I looked down upon groves of oaks loaded with acorns, which they bear sturdily, and great beeches, their pendulous branches heavy with mast. The hazels are showering down ripe nuts, the hawthorns are russet-red with fruit, providing a mealy berry for the blackbird, yet leaving a nut whose sweet kernel the squirrel, the hawfinch and mice of all kinds, know well how to extract. See the countless fruit of the briar roses, round and oval, crimson and coral red. Above all, the blackberries thrive here beyond any fruits that men can plant, now hanging in grape-like clusters, now holding their berries erect as though offering them to the birds. On the blackthorn the sloes are withered and almost sweet, still they keep their fine bloom.

I pass on to a barley-stubble where partridges are feeding. They rise unwillingly and flutter to the turnips, and at the margin, drop at once like stones into the shelter. From this height Selborne is not visible, so hidden is it in woods, but the Hanger shows its position and a blue wreath of smoke betrays it. I wander further; reluctantly as I quitted the wood, I cannot leave the down. Everywhere the hops twine their aromatic garlands about the thorns and hazels, and the resinous odour is borne on the wind. The wild bryony climbs the trees which it loves to honour, and hangs high its wreaths of bright berries, itself then withering away. Here was a woman gathering elder-berries from a tree whose branches hung down with their load as though struck with a blight, oppressed with its own fertility. It was for wine that she wanted them, so she told me—a comforting drink on a cold night, and with sugar at 1½d. the pound well worth making. She had made twelve gallons last week and meant to have as much more. Nuts, too, she had gathered, but now the wind was bringing them down.

When I reached the valley and highway I found myself at Oakhanger, not much above the level of the Forest. The roads here are mended with the forest stone of which White speaks as imperishable; this use of it shows that its lasting qualities are now recognised. It is a coarse grit, very ferruginous, and stains the roads an ochre-red. In Selborne itself,

and in the neighbourhood, I looked diligently for the elegant mason work of the craftsmen of the last century, where chips of this rusty stone were stuck into the mortar joints of the free-stone walls, so that "strangers asked pleasantly whether we fastened our walls together with tenpenny nails." At last I found such a wall in a house near the White Hart Inn, where the chips have all the appearance of the head of a rusty nail. The white freestone (or firestone) is still quarried in the village. It is much jointed, and can be had only in blocks. The scarcity of flagstones is seen in the churchyards, where many graves are covered with shallow arches of brick. Tiny brick arches are also seen over ditches and small streams.

From Oakhanger the way is through one of the "hollow rocky lanes," which White mentions as among the singularities of the place, "worn down by the traffic of ages and the fretting of water." Few things escaped the ken of this acute observer. This deepening by erosion of ancient road-tracks is now noticed in works on geology as a recent alteration of the earth's surface.

To Newton, where lived Gilbert White's good neighbour and friend, I next turned my steps. This is on high ground, and the way lies across the hill. Here a narrow valley winds into the heart of the down for half a mile, though not a half furlong wide. The banks are very steep, and clothed with beech and brush-wood. The flat bottom, being of that soil which, refusing to grow wheat, is "yet kindly for hops" is under that culture, and a more delightful hop-garden there is not in Hampshire. Near this spot, in a beech-tree standing by itself on a little ridge, was a squirrel gathering his winter stores. He warmly resented my impertinent admiration and chattered angrily with impatient gestures. Since I would not go for his scolding, he retired sulkily to a higher branch, which he clasped, and lay motionless. After gathering nuts for a while on my own account, I came back to find him still fuming. He had come down the tree to his old place, and there sat with his back against the trunk, tail over head, and paws folded on his white waistcoat, the picture of a squirrel in the sulks, not ten feet above my head. It was in vain that I called and coaxed him: he would take no notice.

It was late in the year for herborizing, but I looked out for such plants mentioned in the *Natural History* as were likely to be above ground. The mezereon on the Hanger I missed, but found the stinking hellebore and the spurge laurel, and for the first time noticed how this last takes its name from the wood spurge, here very abundant in the tangle. Newton Valance lies high upon the chalk, but the surface-soil is clay with flints, the waste of ancient still loftier hills. These flints are often large and whole, and are much dug for road mending. The chalk itself, being of the lower beds, has few flints and they are not used here, as in Norfolk, for building.

It is here with Nore Hill and the Hanger that the Hampshire

Downs begin, stretching away towards Winchester and the South; and it is to its situation at the base of the chalk that Selborne owes its great natural beauty and diversity of scenery. The water, sinking through the porous rock of the hill, is arrested by the impervious marls which crop out just above the village, and breaks forth in the two streams before mentioned, which have carved out the romantic valley of the infant Wey. Here the rugged banks, unfit for pasture or the plough, are left to support the flora and fauna of the neighbourhood and to delight for ever the lover of wild nature.

From the summit of the Hanger to Wolmer Pond we pass through the chalk to the chalk marls; the village itself is built on the upper greensand; and towards the foot of the mound on which stands the Church, the gault clay appears, while further down the stream we reach the lower greensand of the Forest.

Thus the surface-waters everywhere, coursing for ages over strata varying so much in hardness and solubility, have worn the ground unevenly, forming slopes and ledges, bank and knolls, in a most pleasing variety. "The parish I live in," says Gilbert White, "is a very abrupt uneven country, and therefore full of birds. In a district so diversified as this with such a variety of hill and dale aspects and soils, it is no wonder that great choice of plants should be found. Chalks, clays, sands, sheep-walks, downs, bogs, heaths, woodlands and champain-fields cannot fail but furnish an ample flora." Selborne is now, as it was a hundred years ago, a very paradise for a naturalist, and especially for an ornithologist. The study of birds was White's chief love, and here his industry found ample scope.

The surrounding agriculture is also favourable to natural history, for it must not be supposed that Selborne is entirely given over to wild nature. The chalk marls, the "white malm" of the *Natural History*, are good corn land, and form the "fair enclosures to the north-west, north and east of the village." Again, the soil where chalk and greensand meet is proverbially rich; this is the "black malm—the warm forward crumbling mould" of the gardens and orchards, which the cart-way of the village divides from the stiffer ground above. There can be little doubt that in a country like this the occupation of man, and his tillage of such soil as will repay his care, does on the whole favour the existence of birds and small animals. The ploughing land and the pastures, the meadows with their seeding grasses, afford them abundant and varied food; the herds of cattle and sheep enrich the soil and increase the supply of worms and insects; the cornfields, the orchards, the stubbles and fallows, the sunny hedge-rows with their ditches and mounds, the very weeds of arable ground and of wayside wastes, the thistle, groundsel, chickweed, charlock and plantain, all profuse seed-bearers, each in their turn provide a rich harvest for the fowls of the air and for the small beasts of the wood and

field. A country of thick shady woods and wide exposed heaths will not support such varied life.

It was in Selborne parish that Gilbert White discovered the harvest mouse, then unknown to naturalists, and, if his chief observations were made upon birds, it was because of the great difficulty of studying the little four-footed vertebrates, creatures of such small size, and abroad only in the night time. He complains that the fern owl can only be "watched two hours in the twenty-four, and then in a dubious twilight, an hour after sunset and an hour before sunrise." His curiosity led him to take a lighted candle to his grass plot on a mild winter night to see if the worms were astir; but the little mammals cannot be observed so. There was no lack of diligence on White's part; and even now we have advanced but little in our knowledge of these creatures; so effectually do they keep out of our sight, that the tiger of India and the bear of the frozen zone are more familiar to us than the lesser shrew of our native woods. We may picture to ourselves how in the summer midnight the hedgerows and country are full of life. When the night flowers have opened their blooms and the moths are flying, while the fern-owl chases the dor-beetle and the owls beat the glades on noiseless wing, then does the badger emerge slowly from his hole and the hedgehog shuffles over the dewy grass, the dormice climb about the hawthorn bushes and rifle the hazel boughs, the mole comes out to drink, and the fox and the weasel seek their prey. We can imagine these things, but we shall never see them.

It was by way of Norton farm, famous for its great elm tree which is now replaced by a mighty sycamore, that I quitted this sweet spot. From this rising ground the view of Selborne is perhaps the best; the background is the wooded Nore Hill, "that noble promontory of chalk which sends streams into two seas." A shallow valley connects it with the down under whose hanging woods the straggling village lies in the midst of its fair enclosures. So I bade farewell to a scene of rural beauty, dear in itself and doubly valued by those who cherish the memory of Gilbert White.

A. H. Pawson.

An Early Nest.—On February 23, as I was walking in the garden, I noticed a thrush carrying a piece of moss; on following it to its destination, I discovered that it had commenced a nest in the fork of an evergreen oak, about fourteen feet from the ground; the nest was finished on February 26, and on the 27th the first egg was laid, and two more were laid the two following days. On March 2 I went down to see if the nest was safe, but alas! the gale during the night had blown the tree down in which the nest was placed, and the two old birds were sitting close by, looking very disconsolate. The eggs, three in number, were luckily not thrown out of the nest, and so, as the birds did not return, I took them the following day.

Milton Chapel, Canterbury. H. S. H.

INCIDENTS IN HAMPSHIRE BIRD-LIFE.

I HEARD one autumn day a sharp tapping sound outside the sitting-room window, and, on finding the noise was caused by a blue-tit extracting the kernel of a sunflower seed, I determined, if possible, by means of this favourite food, to induce him and others to feed regularly at the window. I tied ripened heads of sunflowers to a wire arch fixed over this window, and had soon attracted a large party of several sorts of tits. We have now erected a sort of trellis work of canes across the window about seventeen inches from the glass, and from this we suspend coco-nuts sawn in half, pieces of fat, strings of filbert kernels, &c. In the winter we often have as many as twenty birds feeding together. Our visitors (principally tits, great, blue, marsh and cole) are very numerous. At one time we had two pairs of great, three of blue, two of marsh, and one of cole, seven greenfinches, one cock chaffinch, an occasional nuthatch, robin, wren and thrush, also a special favourite, a blackbird whose identity is unmistakable, he having some years ago lost most of his feathers and part of his skin in a fray with a cat, the scars of which fight are left for life.

Wishing that some of our feathered friends would nest close by I tied to the arch a small deal box, in which I had drilled two holes for entrances; it is less than eighteen inches from the window, and well within sight of persons in the room. This plain structure was too unlike the real thing, so the following spring I fastened round the box some pieces of rough fir bark, and for three years in succession a pair of blue-tits have built their nest and reared their brood. Whilst building I could not discover that Mr. Tom-tit did any of the work; he would sit on the canes and eat and scold while his mate came with mouthfuls of building material, moss, hairs, &c. As soon as the young were hatched both parents fed the nestlings all day long. I wish gardeners and others who unjustly condemn so many of our small birds could have seen the hundreds of caterpillars those little creatures took daily to their brood.

Two years the young were hatched and taken away undisturbed, but this year, feeling my friends knew me well enough to trust me, I took down the nest on three separate occasions and on opening the side of the box discovered nine young ones. So far from resenting this interference the old birds were close at hand watching, each with a caterpillar in its beak, and immediately the nest was replaced they flew in to supply the interrupted meal. These also got safely away, and for some time we saw nothing more of the birds, old or young; the old ones have now returned to their former haunt.

A curious difference between the habits of these and of the great tits is that the latter *bring* their young to the window from their nest in a hollow tree stump near by (I know they have nested here two years following) as soon as the coast is clear of

the blues; the parents then teach these young ones (five in each brood, the last two years) to feed themselves from some of the same sort of dainties they themselves enjoyed during the winter. The cole-tits, who seem to care only for fat, are here all through the winter, but come only occasionally in the summer. The marsh comes seldom in the summer, and then only one, the male bird, and this is the more curious to me, as during the winter he is the most tame of all our feathered friends, so tame, in fact, that he will allow us to fasten food on the same cane that he is perched on. One day last winter a nuthatch arrived and surveyed the feast of good things, and knowing his liking for nuts we placed some, uncracked, in one of the empty coco-nuts. Soon we were rewarded by the handsome fellow coming for them and carrying them away to fix into the rough bark of a neighbouring Scotch fir where he would soon crack it with his strong beak and get the kernel out. The male blue-tit seemed much exercised in his mind and watched with great curiosity the movements of the nuthatch; then during the latter's absence his antics highly amused us; he danced excitedly round the rim of the coco-nut, then down into the nuts—small hazel nuts—and finally seized one in his tiny beak and flew off with it. He took it safely for some yards across the lawn when he dropped it and returned for another, this he took to a laburnum tree opposite the window; here his power of imitation ceased, and we supposed he considered he had achieved a sufficient success, for we never saw him attempt it again.

I was particularly struck this spring by the careless way in which the birds built in our garden; they appeared to take no trouble to hide their nests, whether from the fact that the spring was early and fine, or because they had confidence in their human friends, I cannot say. One of greenfinches was so lightly fixed in a lignum vitæ, that unless I had tied it into the branches before the young birds attained any size it must have over-balanced; a blackbird's was so placed in a pine that we visited the hen daily whilst she was sitting and stroked the young ones when hatched; a pair of spotted flycatchers brought out four young ones from a nest in a Gloire de Dijon rose tree over the porch of the front door. A curious thing about this was that when I first saw them bringing materials for building I mistook them for a pair of greenfinches whose nest close by had been rifled; I took this nest and placed it in the rose tree, when without any demur the flycatchers took to it with the aforesaid results.

We keep cats but they never molest our *tame* wild birds; the birds on their part become a little anxious when pussy is about, but I have only to go out when I hear their unmistakable cry of fear and take the aggressor in my arms, when peace is restored and feeding resumed, although I may be only a few feet distant from the window.

This is a most interesting neighbourhood for birds, and here

they seem to have all they want, river, woods, downs, gorse, commons, &c.—no wonder we have so many varieties. In a narrow stream is the kingfisher, in a meadow close by terns have been seen at intervals all last winter and this summer. In 1882 quails bred on the farm, and it was on this farm in Itchen Stoke that a pair of Pallas sand grouse were (alas!) shot in the spring of 1885. Yellow wagtails are occasionally seen, goldcrests revel in the Scotch firs, and I think there are few places that can boast a greater variety of small birds. Although we have been here twelve years, only once—in 1887—have nightingales come close to the house, in that year we had several.

Stoke Manor, Alresford. M. J. E.

CORRUGATED IRON.

OF the many modern innovations which have done so much to mar and destroy the beauty of the country, not one has brought about such disastrous effects as the use of corrugated iron for roofing and building purposes. Its employment is becoming more and more general, and one's feelings are continually being harassed by the discovery of some fresh spot whose rustic grace and beauty have been completely destroyed by the intrusion of this hideous staring abomination; on whose ugliness, moreover, time has no ameliorating effect. The crude colour of new brick and tile soon disappears under the beautifying touch of nature, the growth of lichens and mosses gradually producing a variety of pleasing and harmonious tints. Even slate, after a time, and in favourable situations, falls more or less under nature's kindly influence, and its cold monotonous hue becomes varied and enlivened by patches of yellow lichen; but neither time nor anything else can ever convert corrugated iron into a thing of beauty. Into scenes of otherwise perfect harmony it introduces a screaming discord.

Vegetation in general seems to have a strong antipathy to iron, and carefully avoids contact with it. No moss or lichen will have anything to do with these widely used "galvanised roofing sheets," nor can the hope be entertained that ivy or any other creeping plant will ever spread a mantle of greenery over their glaring ugliness.

The substitution of iron for wood, stone or brick has in other directions done much to deface the appearance of the country. In the case of "dead" fences alone, how far more fit and pleasing to look upon were the old riven oak palings, once so general, than the obtrusive stretches of iron fencing which have so largely supplanted them, and which now deface so many English parks and meadows. Their harsh, rigid and assertive lines serve to draw away the eye from those subtle curves and undulations of surface, which a rough post and rail fence would

in many cases enhance or accentuate. The varied greenish grey tints of oak palings or rough hewn wood fences of all sorts, always harmonise perfectly with their surroundings—tree trunks, foliage, masonry, or whatever else they may be; whereas these formal iron fences, though no doubt useful for protecting a growing hedge, always tend to destroy that natural rustic simplicity which is perhaps the principal charm of the country. This iron work has nothing in common with the surrounding trees and hedges, but suggests town ways and usages; and one can hardly help feeling that it is entirely out of keeping with blooming cottage gardens, wayside meadows, and grazing cows.

Fences made of wood, on the contrary, seem thoroughly to belong to such scenes, and like many old cottages, barns and other buildings, acquire in time the appearance of having grown up there in company with the neighbouring trees. They are as it were a mere adaptation of the surrounding stems and branches to a particular purpose.

But, ugly and objectionable as iron fences certainly are, they are quite insignificant as destroyers of beauty, when compared with the great dreary expanses of cold unsympathetic metal which now thrust themselves on our unwilling gaze wherever we go; and when one sees these glaring sheets of iron replacing in all directions the warm ruddy hues of tiles, or the exquisite greys of reed and straw thatch (at once the most beautiful and most comfortable of all roof coverings), one skrinks from imagining what the appearance of the country must be a generation or two hence.

That sweet homely character which once belonged to our English scenery is fast disappearing. We have no need to go so far back as the time of Gainsborough or Constable for a standard of comparison; the process of deterioration is only too apparent, and is everywhere forced upon our notice. How often the contemplation of some familiar spot costs us a severe pang when we compare its present aspect with that it used to bear even within our own recollection. Noble trees which have outlived many generations of men have been ruthlessly felled, sometimes whole rows at a time, and roadside hedges are kept continually clipped, and thus deprived of their natural beauty and variety. The few trees now allowed to grow beside the highways are so cruelly mutilated and disfigured, that their poor distorted forms are apt rather to excite feelings of pity and indignation than of pleasure, and the wayfarer toiling along the hot dusty roads looks in vain for the welcome shade of thick foliage; in short, too often the beauty of the country is sacrificed for the sake of the roads.

Rows of houses too, of supreme ugliness, presenting a curious combination of meanness and ostentation, the production of the speculative builder, spring up like mushrooms in place of the picturesque and substantial farmhouses and cottages of a former period.

Beauty of all kinds is a precious boon to men, and surely the beauty of the country is a thing to be valued most highly, and to be cherished and preserved with the greatest care. A spirit of indifference to, or even of apparent contempt for the beauties of Nature seems to be too prevalent, cheapness being in most matters the first if not the only consideration. It is a sad state of things that man should be in a state of continual warfare against Nature, instead of working hand in hand with her.

The time will come, let us hope, when these matters will receive more attention than is afforded them in this mercenary age, and happily much might certainly be done towards mitigating the evil—by the liberal planting, in suitable spots, of our native trees, which in the end always produce incomparably more pleasing effects than foreign importations; by allowing that old English institution "the hawthorn hedge" a chance of showing us its full beauty, and carefully avoiding all unnecessary lopping, clipping or shearing, both of trees and hedges; by better taste in the building of cottages, and by rigorously discountenancing the use of such incongruous materials in building as corrugated iron.

By these and similar means, much might surely be done towards regaining a part at least of that charm which was once inseparable from our English highways, lanes and homesteads.

G. T. Rope.

SCLATER STREET.

THE student of ornithology and human nature who goes down to Sclater Street about eleven o'clock on a Sunday morning will be repaid for his excursion into the unsavoury district, by finding a bird and medicine market or fair in full swing, and perhaps the quacks and their nostrums and their victims are the more interesting study of the two. The street is as choked as Fleet Street on election nights, and the atmosphere, besides being redolent of poultry, stewed eels, goats and old clothes, is adorned with the floating feathers shed by the truculent cochin-china cocks, when they struggle in the fat arms of their mistresses. In the depths of the sack held open for our inspection a dozen unfortunate pigeons—Blue Runts, Blondinettes and Homers—trample on one another in a sort of black hole, and as the wayfarer runs, or rather scrimmages through the gauntlet of the dealers, the dazed birds are almost thrust into his face for examination. To cages of unlucky hens packed like herrings in a barrel and all trying to move at once succeed open boxes peopled by inert and drowsy rabbits with room enough and to spare.

At the entrance of the street a German puffs his canaries, but unfortunately for him there is a suspicion afloat that they are only painted sparrows or that they are Dutch, and will not

sing in London, which shows their bad taste, unless indeed a "Dutch canary" is another name for a gilded sparrow. The cages covering the walls of the houses like the gigantic fruit of a creeper resound with the rival concerts of linnets and genuine canaries trumpeting their own merits, and the grey parrots add their screech to the babel. On the other hand the green paroquets are as dumb and solemn as any court of appeal.

But on the whole London shops offer an interesting contrast to those of Paris. The former are replete with singing birds, the latter with those of gay plumage, such as the ruddy Madagascar weaver-bird and the speckled Amaduvada, or else with those whose attire is quaint and striking, such as the Java sparrow. On the outside of one shop are pictures of wonderful animals which recall that delight of one's childhood—"Ye Historye of Four-footed Beestes," with accounts of the awful human-faced monsters, containing all the apocryphal stories that over-credulous travellers from Herodotus down to Marco Polo ever reported to a wondering public. In the road a plaintive old man timidly offers the passer-by a bunch of green rue, possibly because it is Sunday, for as that botanist, Ophelia, remarked—"we may call it herb'-o'-grace o' Sundays." By his side and entirely eclipsing him, a brazen-voiced herbalist makes up mixtures of juniper-berries, sassafras and barberry bark as a remedy for all liver complaints. The street urchin, entirely ignorant of such afflictions, prefers to take long straws and tickle therewith the sixpenny tortoises in the shop window, whose battered shells suggest that they have seen a good deal of life and have very likely been used as missiles in the shopman's family jars.

While the small but exquisitely coloured zebra finches hop about in thorough enjoyment of the strife of tongues, and the tawny owl contentedly blinks and takes forty winks, the hoary old parrot in their neighbourhood swears in an undertone in language that must surely have been picked up on board ship, and the Chinese mocking-birds seem to be in a fever of excitement, bewildered it may be by the superabundance of material for mockery. High up on the wall the laughing jackass, now perverted into a melancholy and cynical philosopher, rouses himself from his dreams of Australian gum-trees, and looking down upon the heads of the charlatans seems on the point of startling the careless throng with his obstreperous "hoo! hoo! ha!" but just as his throat begins to swell with the satire he realizes the full bitterness of the change from his luscious dreams to the sombre reality before him, and ends by making a vicious onslaught with his great fishing beak on the wires of the cage. Above all the chorus of hoarse shouts and cries rise the liquid trill of the chaffinch and the song of the irrepressible lark; these, together with the cooing of doves, irresistibly call up before the mind's eye those well-known green fields and woods where no Autolycus hawks his patent medicines.

W. A. Fox.

THE CHIFFCHAFF'S MESSAGE.

When tulips burn and palm-buds blow
There comes a little ranger;
His quavering voice again I know,
A stranger's, not a stranger.

He comes from Asian thickets sweet,
But ah! too sad for singing;
He tells me of beleaguered Crete,
Of Greece with war-cries ringing.

But as I listen, Crete and Greece,
And all the armoured Powers,
Fade dream-like, for he sings of peace,
And love, and leaves, and flowers.

Here, little wanderer, welcome then
Though all thy notes impeach us;
The world is tired of fighting men,
The birds, the birds shall teach us.

H. D. Rawnsley.

SELBORNIANA.

A Wise Precaution.—Messrs. Cassell & Co., in offering prizes for Wild Flower Collections, in connection with their cheap re-issue of Prof. Hulme's *Familiar Wild Flowers*, are endeavouring to do something to prevent the children from grubbing up the roots of the flowers they pluck. I may perhaps be allowed to quote what they say:—"Roots are strictly excluded from this division (children's), as, whilst it is desired to cultivate in children a love for wild flowers, it is sought to inculcate in them a desire to protect the plants. If this be impressed on the children, the destruction of plants, by which districts have been occasionally denuded of wild flowers, may in future be avoided."

Thornton Heath. E. A. Martin.

A Charitable Supposition.—A good deal is said now-a-days about the want of heart shown by ladies who still persist in wearing aigrettes in their head-gear. This may be in many cases true, but I am sure that the great cause of the persistency of the fashion is still the want of knowledge. Workers in our various societies are apt to think their efforts more far-reaching than they are. The field is the world. Our efforts are, after all, fearfully feeble, as compared with the work there is to be done. Two instances have just come to my knowledge in which the herons' plumes were indignantly pulled out of their owners' hats when they learned, for the first time, how the plumes were obtained. Even at a meeting of a large number of bird-protectors recently, one lady I saw who actually had an aigrette in her hat, whilst even this had been *dyed*, and this lady was most enthusiastic in giving applause to the speakers. These instances must have resulted from want of knowledge.

E. A. Martin.

Hampstead Heath Protection Society.—This Society was formed at a public meeting held at Hampstead on April 7, to take steps for the preservation of Hampstead Heath in its wild and natural state, so far as is consistent with its full enjoyment by the public, and it is hoped that all persons interested in so preserving it will become members. The Society fully recognises the good done by the London County Council in its management of the newly acquired Heath—Parliament Hill Fields. The old Heath, however, is in a different category, as its natural wildness makes it quite an unique possession for any great capital

to have. It is therefore of great importance to preserve this natural wildness, and it is thought that the views of a Society formed of residents and others having an intimate knowledge of all the characteristics of the old Heath, would be of great value, and would be welcomed by the Council. The subscription is 2s. 6d. per annum, which may be paid to the Hon. Secretaries, Mr. C. N. Dalton, C.B., and Miss Emily Field, at Squires Mount, Hampstead.

Encouraging Birds.—"Robin" (p. 76) asks for information as to the best means to encourage birds to nest in the garden. Probably few readers have had so much experience in inducing birds to stay and occupy homes or boxes as myself. The following is a list I have had either occupying houses for building purposes or as shelters in winter:—The barn-owls, kestrels, stock-doves, starlings, wood-peckers, house-sparrows, tree-sparrows, robins, wrens, great-tits, marsh-tits, blue-tits, redstarts and flycatchers; and with a little attention others have been helped to provide homes outside, the wood-pigeons, willow-wrens, hedge-sparrows, martins and swallows; while many others find suitable quarters without help. It is hardly likely "Robin" will succeed in securing this list within four-and-a-half miles of Charing Cross, but in the suburbs of London much might be done to secure some birds, in finding suitable nesting-places if the habits of birds are understood.

JAMES HIAM.

NATURAL HISTORY NOTES AND QUERIES.

A Mole's Larder (p. 63).—Mr. Daubeny will find in Jenyns' *Observations in Natural History* reference made to the supposed habit of the mole of storing up food for future use. The author, indeed, mentions a case of a large quantity of worms (the majority of which had been mutilated in some way) having been found by his nephew in a hole in the ground in the month of November, but of course was unable to say that they had actually been deposited by the mole, though appearances were very much in favour of such a supposition. Mr. Jesse, too, in his *Gleanings in Natural History*, states on the authority of a mole-catcher, that previous to the setting-in of winter the mole stores away a quantity of worms in a sort of basin or hollow in the ground previously prepared for the purpose. To this store the mole repairs during the winter months.

Fyfield, Abingdon. W. H. WARNER.

I have kept several moles in confinement on various occasions for the purpose of studying their habits, but I never found a disposition to lay up stores in the way mentioned. They seize and kill worms at the *head part*, and gradually draw them through the jaws, chewing up the writhing worm to the end. Moles in confinement will kill and devour a fresh one put into their box or pen. They fight like bull-dogs with fore-feet and mouth; the stronger one eats its way in the side of its victim, devouring all the inside, flesh, and bones up to the toe-nails, which they reject. The only way to definitely clear up the point raised by Mr. Daubeny would be to open up runs of moles at various seasons of the year.

J. HIAM.

A gentleman living some five miles from here writes to say:—"I saw an old mole-catcher on Thursday, and he told me that before winter moles often stored worms and always bit their heads off. Still," he says, "worms will not keep long; I have tried experiments with them, and worms soon decompose—very rapidly—so he did not think that the store could be meant to last for any length of time."

Thetford. EDMUND THOS. DAUBENY.

Curious Nesting-Place of Robins.—In the recreation-ground of the junior students in this college, a pair of robins have this year chosen a very singular nesting-place. The main walk of the junior house runs parallel to the boundary wall. Between the outer edge of this walk and the wall is a belt of greensward about seven yards wide without shrub or weedy growth of any kind

except a few small clumps of briers. At the base of the wall, in a slight dip of the ground, lies loosely on its side an old tin paint pot, capable of holding about an imperial gallon. This pot is nearly half filled with withered beech leaves blown into it by the wind; and on top of these leaves, midway in the pot, the robins have built their nest, which to-day (March 27) contains five eggs.

St. Patrick's College, Maynooth. X.

A Jackdaw's Note.—Years ago we had a tame jackdaw that was very fond of standing on the fender before the fire in the dining-room, and behaving in the way the mocking-bird mentioned on page 79 did, only he must have looked more ridiculous still, for he stretched out both wings, opened his bill as wide as possible, put his head on one side, and closed his eyes. In this position he would remain for a length of time, thoroughly given up, it seemed to us, to the enjoyment of the heat.

Llandudno. S. T.

Blackbird.—In my garden there is a hen blackbird with a yellow bill. As they become advanced in years their bills change colour. This must be a very old bird to have a bill bright yellow like the cock.

Thetford. EDMUND THOS. DAUBENY.

The Nightingale's Croak.—May I ask if it is generally considered that the nightingale croaks on its first arrival in the spring as well as after the young are hatched in the summer? The idea was a new one to me until this spring, when I was assured by an ornithological friend that he had repeatedly noticed it. About three weeks ago I had the opportunity of seeing and hearing a nightingale give about a dozen croaks in succession and then fly to another branch and burst into a continued song.

C. J. PALMER.

Nuthatches.—For the last two winters a pair of nuthatches have been in the constant habit of flying into our library, which has a door opening into the garden, to pick up the nuts awaiting them. A few are strewn on the floor near the door, and others are placed in a basket at about a couple of yards' distance from it, and very near my writing table. As long as the door is open, and the basket contains nuts, they pay repeated visits. A coco-nut cut in half and hung at the door is another attraction. I have not yet induced them to take nuts from the basket when held in my hand. For the last six or seven weeks they have ceased their visits. I wish the squirrels, who may frequently be seen among the fir trees in our little garden, could be prevailed upon to approach the house; but hitherto neither nuts nor sopped bread have had the effect of overcoming their timidity. The stable cats are never allowed to come this side of the house.

Dorrington Vicarage, Shrewsbury. MARY L. WAYNE.

Martins.—On March 22 I saw from twenty to thirty martins hawking high up, too high to be certain of the kind, but I think they must have been sand martins, for if there had been any white about them I should have seen flashes of it. The nearest abode of sand martins is more than three miles from us, and I have not heard whether they have been seen yet. Am I not right in thinking it a very early visit? On the 29th I heard a chiffchaff, but not since. They seldom remain with us; last year was the first for many years that one has remained the whole summer constantly within hearing. Ours is not a good neighbourhood for birds, the trees and hedges are too ruthlessly cut down.

Wallingford. M. S. Y.

A White Sparrow.—Last September, about the 28th, I saw a perfectly white, or rather cream-coloured, sparrow. We had a very heavy gale of wind and our lawn was covered with swallows sitting all over it, and by threes on the croquet hoops, and suddenly this perfectly cream-coloured bird descended among them and then flew up into the trees, and I feel certain from its behaviour that it was a sparrow, though I could not get close to it, without a dark feather in it. I have not seen it since. A friend tells me that for the last two years she has seen a pair of sparrows in the near neighbourhood of Windsor with white heads, but their eyes are not pink. I never but once before saw so many swallows on

the ground, and that was on a lovely autumn morning early, when there had been a heavy dew, and the lawn was covered so thickly with gossamer that at a little distance the grass had the effect of being covered with water, so thick were the drops on the web. The swallows were sitting in great numbers in the sheen, and I could distinctly see them turning their heads from side to side, and apparently drinking the dew with great content. The sight was a very lovely one.

Wallingford. M. S. YOUNG.

A Hidden Foe.—I have noticed this season a number of the corolla tubes of cowslips cut through just above the ovary. In some cases on removing the corolla the ovary was found to be cut longitudinally, the placenta with its ovules being exposed. Some of the ovules were "nibbled." In many flowers I could find no cause for this, but, on a careful search being made, in others I found a small green and very lively caterpillar concealed within the calyx. The outward appearance of the flowers in the umbels was quite normal. If others have found this larva at work I should be glad to learn its name.

CHARLES F. W. T. WILLIAMS (Bath Branch).

Summer Migrants.—As we are daily receiving additions to our resident birds, perhaps I may mention, with a hope that others may follow my example in order to compare notes from various localities, the arrivals. Up to the 12th they are as follows:—Chiffchaff, March 25; swallow, March 26; cuckoo, April 8; willow-wren, April 11; ring-ouzel, April 11. The swallow and cuckoo have made their arrivals records for early appearances, and the ring-ouzel is a rare visitor.

Astwood Bank, Worcestershire. JAMES HIAM.

ANSWERS TO CORRESPONDENTS.

M. B. D.—It would be quite impossible to find room for the Report.

H. E. B.—Please read Rule 1.

C. R.—*Claytonia perfoliata.*

H. D. R.—Jubilee bonfires seem hardly suitable for discussion in *N.N.*

RULES FOR CONTRIBUTORS AND CORRESPONDENTS.

1. All communications for NATURE NOTES must be authenticated with name and address, not necessarily for publication.

2. The return of unaccepted contributions cannot be guaranteed. We cannot undertake to name specimens privately, or to return them.

3. All communications for the July number must be in the Editor's hands by the 10th of June.

4. Communications for NATURE NOTES should be addressed to the Editor, JAMES BRITTEN, F.L.S., 126, Kennington Park Road, London, S.E., as should specimens for naming, books for review, &c. The Editor cannot undertake to reply privately to questions.

5. Letters connected with the Selborne Society, as well as all inquiries as to the supply of NATURE NOTES, and subscriptions, should be addressed to the Secretary of the Selborne Society, A. J. WESTERN, Esq., 20, Hanover Square, W.

6. The Editor is not responsible for the contents of the last page of each number: communications respecting that page must be addressed to Mr. WESTERN, as above.

SELBORNE SOCIETY NOTICES.

Annual Meeting and Conversazione.—The Annual Meeting and Conversazione took place on May 20, at the Society's Rooms, Sir John Lubbock, M.P., F.R.S., in the chair. A full report of this very successful and enjoyable evening will appear in the July number of NATURE NOTES.

Excursion to Selborne.—The whole-day excursion to Selborne will take place on Saturday, June 12. The party will travel by the 11.25 train from Waterloo (Clapham Junction 9'39), reaching Liphook at 1.5. Return from Liphook at 8.5, reaching Waterloo at 9.37. Conveyances will be in attendance for those who wish to ride to Selborne, a distance of about five miles. Meat tea will be provided at the Queen's Arms at 1s. 6d. per head. An arrangement has been made with the Railway Company by which, if the party numbers fifty or more, the return fare will be 4s. All those who intend being present must notify Mr. E. A. Nash, Hon. Sec., 20, Hanover Square, before June 5, enclosing the amount, after which no application for tickets at reduced rates can be considered.

New Branch.—The Council notes with pleasure the formation of a new branch at Portsmouth. Dr. J. E. H. Kelso, of Chesterfield, 67, Elm Grove, Southsea, has undertaken the duties of Honorary Secretary and Treasurer, and will be glad to hear from those who wish to join the Branch.

Leaflet.—"The Goura Mount," by A. Patterson. Any one desiring copies of this leaflet for distribution should communicate with the Secretary, stating the number required. They will be sent free of cost, but sufficient stamps for postage should be enclosed. The leaflet contains an appeal to the women of England on behalf of the rare crowned pigeon (*Goura coronata*), and the Victoria crowned pigeon (*Goura victoriæ*), whose plumage threatens to become popular for the decoration of ladies' hats and bonnets. It will be remembered that specimens of the crowned pigeon were exhibited by Mrs. E. Phillips at the Conversazione, which had been obtained at a recent sale of feather trimmings.

Field Club Saturday Rambles :—

June 5.—Visit Hayes and Keston Commons. Take return ticket to Hayes. Cannon Street 2.18, London Bridge (S.E.R.) 2.21, Elmers End 2.58, where change. Croydon contingent take train from Addiscombe Road, 2.32 to Elmers End, where change. Thornton Heath contingent enter train at Thornton Heath, 2.32, for Norwood Junction, where meet conductor, Mr. Martin.

June 12.—Visit to Selborne. See above.

June 19.—Leave Rye House Station on arrival of 2.15 p.m. train from Liverpool Street (Clapton 1.2), for walk by river bank to Ware. Tea at Old Star Inn about 5.30 p.m. Day ticket to Rye House 1s. 6d. Guide, Mr. R. Marshman Wattson.

June 26.—Leave West Drayton Station on arrival of train leaving Paddington at 2.50, Ealing Broadway 3, Broad Street 2.20, Willesden 2.52. Walk along the banks of the river Colne. Tea at The Fisheries, West Drayton. Guide, Mr. Ravenshaw.

There appears to be some doubt as to what constitutes membership of the Field Club, and in order to remove this the Committee begs to state that all members of the Society, to whatever branch they may belong, are free to attend the rambles, and will be welcomed. Non-members can attend on payment of one shilling per annum, which is payable to Mr. Nash, the Hon. Sec.

Council and Committee Meetings.—The next meetings of the Council will be on Tuesdays, June 1 and July 6, at 5.30; of the Magazine and Leaflet Committee on Tuesdays, June 15 and July 20, at 5.30; and of the Field Club Committee on June 1, after the Council Meeting, to consider final arrangements in regard to the Selborne excursion.

ANNUAL PAYMENTS FOR 1896.

	For Magazines.	*Branch Contributions.*
Clapton	£6 11 5	£1 5 0
Croydon and Norwood... ...	3 11 11	0 16 3
Brighton	...	1 5 6
Southampton (balance) ...	...	5 0 0
Wimbledon and Putney (additional)	2 13 4	...

EDWARD A. MARTIN, F.G.S.,
Hon. Sec. Magazine and Leaflet Committee.

Nature Notes:
The Selborne Society's Magazine.

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POACHING IN EPPING FOREST.

DESPITE the grave charges of reckless tree-felling raised against the Forest Committee two years ago, there still remains, at all events in other respects, much reason for congratulation. Doubtless, through overzeal, errors of judgment were committed; though hardly sufficient to warrant the hostile attitude assumed towards the Corporation of London, or the total ignoring of its past services in the preservation of the Forest. But, rightly or wrongly, the adverse criticism in one sense has been beneficial. It has made clear, by means of the deep public interest aroused, that any future interference with the Forest, unless absolutely unavoidable, will be strenuously opposed. That the lesson has not been altogether lost is shown to some extent by the last report issued by the Committee (January, 1897), in which they refer to the "gratifying" fact that no complaints concerning their work have been received since the publication of the experts' opinions in 1895; and furthermore state that with a view to preserving the natural features of the Forest, they have issued an order to the effect that trees overthrown by the wind, and others that die, shall not be removed without special directions, unless causing obstruction.

Previously to the constitution of the Corporation as Conservators, the Forest, or what remained of it, was in a miserable plight. It stood defenceless against encroachment, and rowdyism reigned supreme. Gipsies and loafers, unchecked, levied blackmail on the visitors, and did not hesitate, when opportunity offered, to rob the little children who were brought down in vans "to spend a happy (?) day." In addition, these ruffians wantonly destroyed nearly every living thing within their reach.

The Epping Forest Act of 1878, however, effectually checked all such nefarious practices. Under its provisions the Conservators were empowered, *inter alia*, to exclude gipsies, hawkers, beggars, rogues, and vagabonds, and to prevent bird-catching, trapping, and the taking of eggs or nests, as well as the killing, taking or disturbance of deer, game, or other animals. A superintendent and twelve keepers (now increased to sixteen) were appointed to enforce the bye-laws, each keeper having his allotted beat. That these officials efficiently perform their duties is unquestionable. The Forest now is as safe to traverse as any West-end thoroughfare, and in some respects more so. But considering the fact that it extends in broken portions from Wanstead Flats in the south, to beyond Epping in the north—a distance of nearly twelve miles—that a considerable part of it lies within walking distance of the poorest districts of East London, and the remainder is bordered by towns and villages thickly populated, it is hardly a matter of surprise to find, among minor offences, that poaching and bird-catching, to a limited degree, still exist. Indeed, it would be impossible entirely to suppress them with the present scanty staff, unless each individual keeper could be—like Sir Boyle Roche's bird—in two places at once. Nevertheless the risks involved render the game hardly worth the candle, a fact testified by the continual prosecutions at the local petty sessions. Practical evidence of the deterrent effect of the convictions obtained, and the steady improvement which is taking place, is afforded by the marked increase of the fauna during the last few years.

The forest poacher, pure and simple, is usually a local artisan, labourer, or ne'er-do-well, fond of a bit of sport, who knows the ground. The cockney hailing from Whitechapel or Bethnal Green, as a rule, confines his operations to bird-catching. These men, mostly, are engaged at their work during the week, and Sunday therefore is their special field day; the winter months being the favourable period of the year for their operations.

Perhaps the most daring of the poaching enterprises undertaken at the present time in the Forest, are those now and again waged against the deer, both fallow and roe, which animals, according to the Committee's last report, number about 130 and 13 respectively. A snare of strongly twisted wire is stretched between a couple of stout saplings, across openings in bushes where the deer are likely to pass, or can be driven towards. Fawns are sometimes taken in this way, but full-grown deer very rarely; the latter are able to scent the human taint about the snare for weeks after it is set; and the keepers usually detect the wires long before the odour has gone. Even should an attempt prove successful, an awkward problem arises as to the disposal of the animal's body, and although it may be comparatively easy to hide the remains in the thick underwood until after dark, yet to get it away un-

observed is then no easy task, although occasionally accomplished with a fawn.

In the cold and wet weather hares quit the contiguous arable lands and seek shelter and warmth in these extensive woodlands. Gangs of men, eight or ten rough fellows together, may now and again be met with crossing the Forest, followed by a bevy of dogs ranging in breed from a terrier to a lurcher. These parties avoid, as far as possible, the frequented spots, and are cunning to a degree. Innocently enough in outward appearance they slouch along, hands in pockets and smoking their pipes, with the dogs closely to heel, until a likely place is reached. Then if the coast is clear the word is given and the ground is systematically hunted; the terriers searching every bush, and the larger dogs circling round to take up the running when the quarry is found, or possibly to catch a hare in its "form." Long chases are not encouraged; and it usually happens that the unfortunate hare, leveret, or rabbit put up is mercilessly "chopped" by the pack without a chance. Sometimes a fawn meets with the same fate; more frequently perhaps by this mode than by snaring. Instances of the kind have occurred quite recently, but the carcase in each case has been left behind. A well trained lurcher is of course invaluable to a poacher, although the mere fact of its possession brings the owner under suspicion, especially if he resides near the borders of the Forest. These dogs are a cross between greyhound and sheepdog, having the speed of the one and the nose of the other.

Where rabbits abound, in such places as the thick bushes on the eastern side of Connaught Water, snares are placed in the runs by men who prowl through; sometimes singly and sometimes in couples, keeping a sharp look out for the keepers and sneaking off at the first appearance of danger. If successful poor bunny's neck is hastily dislocated, and the body stowed away in the deep coat pockets which the fraternity adopt.

Similar snares are set for hares where their runs can be traced, but not often, for, unless at once seized and killed, their piteous screams alarm the neighbourhood. In unfrequented situations where there are rabbit burrows, a ferret is occasionally employed, either muzzled or with a cord attached, to prevent it from laying up. Purse-nets are spread over the surrounding holes, into which the rabbits bolt, and are quickly secured.

Wild pheasants and partridges are now fairly abundant in and around the Forest, but are seldom shot. The carrying of a gun in its precincts is too perilous a proceeding for a poacher lightly to undertake; besides, the reports would immediately put the keepers on the alert, and probably bring about the speedy arrest of the culprit.

Self-hunting dogs pursue hares and rabbits, and are a great pest in harassing the deer. Repeatedly one of these curs may

be seen chasing a herd until the fawns are ready to drop from mingled fear and exhaustion. The bye-laws require all dogs to be kept "under control;" but unless by shooting—which the keepers are prohibited—it is difficult to secure them when hunting on their own account.

Wild cats—strictly speaking, domesticated tabbies which have adopted a savage life—are found at intervals. They kill the young rabbits, squirrels and birds. Two years ago a pair were dislodged with difficulty from a hollow tree in Monk Wood, where they had taken up their abode.

From the end of August to the commencement of February—and even at other times, in defiance of the Wild Birds' Protection Acts—the bird-catchers put in an appearance in the adjacent district. The "March flight" and the "Michaelmas flight"—the arrival and departure of the migrant birds—are their best seasons. In the fields and meadows on the Lea Valley side of the Forest, beyond the Conservators' jurisdiction, they are seen with their long spread-out clap-nets and call-birds, some of the latter in cages arranged around; others, tethered by the leg, fluttering up and down, tempting to destruction the linnets, greenfinches, or other guileless songsters near, with just a chance of alluring a prize in the shape of a bullfinch or goldfinch. The clap-netter seldom ventures within the Forest boundaries, for his bulky stock-in-trade—which he cannot afford to lose—prevents a hasty retreat. Not so the chaffinch "pegger," who, less encumbered, is met with at the commencement of the mating season. He is easily recognised by the mysterious-looking parcel, wrapped up in a handkerchief, he bears under his arm. This encloses the caged trained decoy bird known as a "battling-finch." In addition he has in his pockets a stuffed lure mounted on a spiked perch, two or three pieces of thin split cane or whalebone with spiked tips, and a box of birdlime. Haunting the outskirts of the Forest, the "pegger" listens intently for the familiar "pink, pink" of the wild chaffinch. When the sharp metallic sound is heard he quickly traces the bird to the tree in which it is located. At the foot he places his cage, concealing it with a handful or two of grass or bracken. In the trunk he affixes the stuffed lure, and over it his pieces of cane or whalebone, smeared with birdlime. Then, with an encouraging chirrup to his decoy, he retires a few paces and awaits events. It is the jealousy of the wild chaffinch which is worked upon. The caged bird trills out its crisp challenge notes, to which the other defiantly replies, and soon flutters angrily down to do battle with its supposed rival, for which it mistakes the lure. Its wings are immediately pinioned by the treacherous birdlime, and it falls a helpless victim to the ground. The "pegger" himself does not always get off scot free. Often the tables are turned, and the captor himself becomes the captive, the Forest-keepers adopting every possible ruse to secure the offenders in the very act.

Chingford chaffinches, it may be mentioned, have a special reputation among bird-fanciers for the power and sweetness of their song, and are sought after accordingly.

Squirrels are frequently knocked down from the trunks or branches of the lofty beeches by lads armed with catapults, and by the throwing of short heavy sticks, which, in the coppices where the unfortunate rodents can be surrounded, prove deadly weapons.

Some reference should be made, in conclusion, to Nature's own poachers, which are well represented in the forest. Foxes breed every year in its northern portions, and, during the past winter, one has been repeatedly observed close to Chingford. They are crafty thieves, and live on a varied diet of poultry and game, but if hungry are prepared to fall back on rats and mice, or even frogs and worms. Badgers were believed to be extinct until 1894, when a pair were introduced. A new-comer is stated to have been seen last autumn, but the report lacks confirmation. Badgers destroy nests of young rabbits, and will take a leveret if they have the chance. Polecats and martens have disappeared entirely during recent years. Stoats are becoming scarce, but weasels are plentiful. Stoats are dangerous foes to hares and rabbits, the latter especially. A weasel at times will kill a leveret, rabbit or mole, but like the stoat is most destructive to rats, voles and mice. The hedgehog is occasionally found in dry ditches in secluded spots, but does little hurt beyond demolishing eggs in nests built on the ground. Among the birds coming within the category, jays take pre-eminence by reason of their number and cunning. They devour quantities of eggs and young birds. Jays are hated by poachers, whose presence is betrayed by the bird's harsh scream of alarm, which constitutes it the sentinel of the woods. The sparrow-hawk, kestrel, and several species of owl, are comparatively common, as well as crows and magpies, but none of these are sufficiently numerous to do any appreciable harm. Of the reptiles the common snake and viper are now but thinly scattered over the forest. In the early years of the Corporation's management a price was set on their heads, which nearly led to their extermination. The common snake feeds principally on frogs and insects, but the viper consumes mice and birds as well as frogs.

H. CHIPPERFIELD.

Hawfinches.—As regularly as the year comes round my premises are visited by hawfinches which breed a mile off. They arrive as soon as the young are able to leave the nest; and the object of their visit is to feed on the wild cherries round my house, which they attack when young and unripe, and I think they eat the kernel only. As soon as they have cleared the cherries off they disappear for the year. They stay all day, and the brood retires in a body each evening to their breeding place.

Market Weston, Thetford. EDMUND THOS. DAUBENY.

WHERE BLACKHEADS BREED.

THERE is no more interesting and withal more beautiful sight than a breeding place of this elegant little gull. Such a one there is not far from Brigg, in Lincolnshire, and thither, one bright morning in early May, I bent my steps, accompanied by a few friends. Long before one gets into the neighbourhood of the thick fir woods among which the ponds frequented by these birds are situated, little parties of gulls are to be seen following the plough and feeding greedily on the grubs and insects exposed by the ploughshare, or skimming through the air, no doubt carrying a supply of food to their already hatched and craving young. Arrived at the woods to which we were admitted by the courtesy of their owner, we became sensible of a confused sound, almost like the distant roaring of the surf on a savage and rock-bound coast; this sound as we approached yet nearer resolved itself into the wild, harsh, yet somehow not unmelodious cry of thousands of angry birds. Someone was before us, and we hastened on between thick fir trees, past small tracts of more open land covered with heather and thick tussocks of coarse grass; bushes of sweet-gale or bog-myrtle here and there showing the marshy, peaty character of the soil.

The gulls had by this time discovered our party, and flew in rapidly increasing numbers above our heads, making the air ring with their cries. Some of them were hawking after flies almost as swallows do, or, to take an example from birds whose habit it is *not* to do so, like starlings or sparrows in hot, sunny weather in spring. The air above these warm, sheltered grassy rides, redolent of delicious piny odours, was clouded with gnats and other insects, and here the blackheads, with many hungry little ones to feed, had found a new source of provision. The ponds themselves were an extraordinary sight, as, when first we reached them, hundreds of gulls were sitting on the chain of grassy islands which lie in a sheltered hollow in the full glow of the afternoon sun; the air was filled with thousands more, a perfect hurly-burly of fleeting forms and wild, wailing voices. One second after our arrival not a single gull was left sitting; even a few, who having built their nests in two or three stumpy pine trees might imagine themselves safe, were fled.

Besides the main colony on the islands and among the reeds on the borders of the large pool, there are two small off-shoots close by in the woods; one in so soft and marshy a place as to be quite safe from intrusion.

This year (1897) the water being considerably higher than usual, those gulls who breed in the reed-beds on the margin, have departed from their ordinary somewhat slovenly method of nest-building, and have collected large heaps of material—rushes, dry grass, &c.—on which to deposit their eggs; one or two have even appropriated the vacated nest of a coot, and these

towered above the rest, though all stood considerably above the surface of the water, which had receded a good deal during the past dry fortnight.

Before we stepped on to the first green island we noticed several young gulls in some of these heaped-up nests on the margins. They are, unlike a good many newly hatched birds, very taking youngsters, being covered with soft coffee-coloured down, with tufts of darker brown almost forming stripes and patterns and looking very like chenille. Their large dark eyes and sharply pointed beaks give them a wide-awake and very intelligent expression.

On the islands themselves, in every little hollow and depression of the ground, on every stump, under every clump of elder bushes, and even on the rough bridges which join the detached masses of solid ground, were eggs and young birds; the former in such variety of colouring, and in such variety of number in the different nests, here one, there two, three, and even four or five, that some of the onlookers became quite bewildered and knew not which way to turn to avoid stepping on one or other of them. Here we see the more usual plan of the gulls with regard to nest-building—mere apologies for nests were most of them, just some odds and ends of dried rush stems collected in a little depression, on which the eggs were laid.

The islands are riddled with rabbit-holes, and in these a colony of sheldrakes have established themselves and rear large families every year. In 1896 the colony was composed of more than forty individuals at the close of the breeding season. These handsome birds are generally the shyest of the shy, but we were fortunate enough to descry a fine pair, swimming about quite close to us in an agitated manner, plainly betokening the presence of their young not far away. Jackdaws, too, breed in the rabbit holes and live upon the eggs, and in many cases upon the young gulls themselves.

The islands had been a good deal troubled by rats just before we visited them, which stole upon the sitting gulls at night and killed them, and though these horrid creatures had been pretty well exterminated, we found one freshly-killed bird, and were able to examine its exquisite plumage. The head is not, as the name would lead us to expect, black, but a rich dark chocolate colour, the back delicate grey, under parts pure white, eye brown ringed with scarlet, bill, legs and feet, scarlet; this latter colour loses its brilliancy after death.

It was now time for us to leave the spot and catch our train homewards, so with one last glance at the white whirling cloud of gulls, which almost looked like a snowstorm of gigantic flakes, and with many thanks to the gentleman whose kindness had enabled us to witness this most interesting sight, we again traversed the woods, the cries of the gulls growing fainter and fainter, till at last they no longer reached our ears.

MARGARET L. ANDERSON.

TO THE ORANGE-TIP BUTTERFLY.

(EUCHLOE CARDAMINES.)

CARDAMINES! Cardamines!
Thine is the hour when thrushes sing,
When gently stirs the vernal breeze,
When earth and sky proclaim the spring;
When all the fields melodious ring
With cuckoos' calls, when all the trees
Put on their green, thou art the king
Of butterflies, Cardamines.

What though thine hour be brief, for thee
The storms of winter never blow,
No autumn gales shall scour the lea;
Thou scarce shalt feel the summer's glow;
But soaring high or flitting low,
Or racing with the awakening bees
For spring's first draughts of honey—so
Thy life is passed, Cardamines.

Cardamines! Cardamines!
E'en among mortal men I wot
Brief life while springtime swiftly flees
Might seem a not ungrateful lot;
For summer's rays are scorching hot,
And autumn holds but summer's lees,
And swift, ere autumn is forgot,
The winter comes, Cardamines!

C. J. LONGMAN.

A NOVEL PET.

WHEN leading a quiet, solitary life in the bush, far from the busy haunts of men, many queer creatures are by turn admitted to a share in one's affections. Young wallaby, "bloodsuckers," "death-adders," and "tarantulas," have all had their day with me in the hut, not to mention frogs and beetles of various species; but for interesting little ways my present *protegé*, now occupying a saucer covered by an inverted glass on the table before me, will yield the palm to none. The handsome little lady who now holds my affections is a neuropterous fly, probably a *Raphidia*, and was lately captured by a friend who knows my tastes, at the commencement of the Flowerdale district, three miles from here. The capture was presented to me as a "new sort of mantis," and indeed one cannot wonder at the mistake, for the general aspect of the insect, and especially the folding up of the front pair of legs, is decidedly mantis-like. A glance, how-

ever, at the large straight clear wings, and at the way in which the powerful forelegs are carried under the thorax, will dispel the illusion. In the green mantis this raptorial pair of legs is folded up closely under the long thorax, with the lower joints outwards; in my little pet, on the contrary, this pair is folded vertically in the form of a triangle with the apex downwards and touching the surface on which the insect is resting. The lower joints, too, slide past the upper one when these limbs are "shutting up" after use, so that the top joint or one attached to the thorax occupies the front place while the insect is at rest. Immediately, however, that a fly comes within range, these joints, which have been packed away at the back, slide forward with great suddenness, and the fly is clutched between the femur and tibia, or we might as well say between the shoulder and forearm; these front limbs really are arms to all intents and purposes, as they are not used in walking, but for catching and holding the prey, and afterwards for cleaning the head and antennæ. The two joints between which the fly is held are armed, as in the mantis, with formidable spines locking into one another, so that the prey stands no chance of breaking away again; I have never known even the larger and stronger flies, such as the meat flies, to escape after that terrible grip has closed upon them.

My lady does not trouble to stalk her prey to any great extent, generally waiting until it comes almost within range, and then gingerly advancing a few steps on tiptoe. She often strikes while the fly is out of range, and then assumes an air of annoyance to see him hurriedly retreat; this may be due, perhaps, to some optical illusion caused by the circular inverted glass under which she is confined. She will occasionally make a grab at some fly which has settled for a moment on the *outside* of the glass, and will then hurriedly bring her "hands" to her mouth, ludicrously like a child sucking its fingers after striking them against something hard. The prey is generally grasped with one arm first, and held between the spiny joints to prevent escape, while the other arm is thrown round at some distance from the first, so as to allow plenty of room for the mandibles to work. The fly is not devoured entirely, as is the case with the mantis, but an incision is made and the contents of the body extracted through this, the shell of the carcase being rejected. The incision is almost always made at the "throat," so to speak, or at the base of one of the wings, which is the most fatal spot.

It is amusing to watch the aspect of this little carnivore when on the war-path. The antennæ, which are short and black, are generally in motion, and go alternately, one moving forward while the other is going back; on the approach of a fly, however, these sensitive little organs are flung back and pressed closely down to the head, and the whole delicate little frame assumes an air of indescribable ferocity, reminding one of a feline creature about to spring upon its prey.

The "strike" is short, sharp, and generally decisive, unless the prey happens to be a little too far off, which is sometimes the case. The green mantis, which I have also under observation for the sake of comparison, never makes this mistake, but always waits until the prey is safely within range before darting out the death-dealing arms. The mantis, however, is much more sluggish in its nature and not so interesting a pet as my little neuropter, about whom there is a very human air of cuteness and alacrity which at once arrests the attention. She is playful, too, at times, stretching her arms and clawing at the glass like a cat at the leg of a table or chair. She will occasionally stand upright against the glass and then bend backwards like an accomplished gymnast, at the same time making violent demonstrations with the muscular arms; I have even seen her catch a fly on the wing with one of these same useful appendages; a feat illustrative of her quickness and agility.

After a fly has been despatched the "arms" are carefully cleaned, between the spines and so on, with the mandibles, and then the latter are cleaned in their turn by the "arms," which are also employed to give the head a good polish all over.

And now as to personal appearance: in figure my pet is elongated, but not nearly so slender as her distant cousin, the lace-wing fly (*Chrysopa*). Her most striking features are the strong folded forelegs, looking like a big comforter on the neck, and the long, straight, reticulated wings, which project over the body, and are four in number. They are clear except for a very slight brownish tinge, and have a narrow brown margin, which does not extend to their termination. The head, antennæ, thorax, and upper surface of the body are black, or nearly so, the latter having a double series of light, yellowish markings along it; the underside is a light grey with a black streak along the centre. Along each side of the body runs a broad, pink stripe, the legs are red, as is also the extremity of the body. This pretty creature has laid three batches of eggs while in captivity; they are very small, oval, and yellowish in hue; the last batch, however, which numbers several hundreds, is almost white. They are laid upon the surface of a gum leaf which adorns the floor of my pet's boudoir.

H. Stuart Dove.

Table Cape, Tasmania.

Robin's Nest.—This spring a robin paid regular visits to this house, flying from room to room, and sitting especially on some bulrushes in the hall. Both here and in one of the bedrooms it laid an egg and ultimately built its nest on the top of a cornice in an inhabited bed-room opposite the other. Early in the morning the bird's song outside the window aroused the inmate of the room, and she always rose and admitted the little builder. After spending much time and labour on the work, the bird deserted the nest; and when house-cleaning operations began, the servants found that the nest, which was unusually large, was completed, and contained one egg.

Dean's Court, Wimborne. M. S. Laidlaw.

A YEAR'S NESTS.

BIRDS' nests are, on the whole, perhaps the most beautiful work of nature. They are so exquisitely constructed, the eggs in them are of forms so symmetrical and hues so lovely, that he who does not admire them must be a creature devoid of soul—

> "The motions of whose spirit are dull as night,
> And his affections dark as Erebus."

It is a pity that in these days of urban life so few have an opportunity of properly studying birds' nests. To do this one must not only live in the heart of the country but must possess a garden of tolerable size, where they can be observed at leisure. Those who dwell in towns must be content with collections in museums, and may think themselves fortunate if they are within reach of the Natural History Museum at South Kensington, where the nests and eggs of the principal British species are represented with wonderful accuracy and artistic effect.

Owing, probably, to the mildness of the previous winter, there were more than the usual number of nests in our garden last summer. Blackbirds and thrushes were of course the earliest builders, and these began their operations long before the deciduous trees were in leaf, one of their favourite sites being a large rhododendron clump on the lawn. By April the nesting season had really set in, and almost every week brought a discovery of some beautiful structure of linnet, chaffinch, or greenfinch, besides rarer kinds, with some of which—to our shame be it said—we were unacquainted. As regards these latter we did not get much enlightenment from gardeners or rustics. Country people are indeed—as pointed out by Mr. Hudson, in his delightful book *Birds in a Village*—singularly ignorant in the matter of bird life. They recognise broad distinctions, but are apt to confound different branches of the same family. Every finch is to them a "chaffinch," and every tit, a "tom-tit," while they know nothing of the goldcrest, the fly-catcher, or the blackcap. One nest that puzzled us was a tiny structure made almost entirely of a substance resembling coco-nut fibre. The bird, unfortunately, deserted it when only one egg was laid, so we could not see what the young ones were like. The nest that perhaps interested us most was that of a great tit built in a barrel under a lean-to, near the potting shed. The barrel was nearly full of stakes, and the tit had built in a vacant space between them, not far from the bottom. The nest was not discovered till the eggs were hatched, and the people had been passing and repassing the lean-to daily, and even removing stakes from the barrel, without frightening the hen bird. We now often looked into the barrel, and could dimly descry various little fluffy things with wide open yellow beaks, embedded in the mass of

wool and feathers that formed the nest. If the mother were absent she would soon make her appearance on the nearest apple tree, and by sharp cries of "tit, tit, tit" show that she somewhat resented our inspection of her offspring. If, however, she were already on the nest, she would remain there undisturbed, and such was her fearlessness that on one occasion she allowed herself to be mistaken for one of her young, and lifted right out of the nest. Then, as our hand unclosed, she flew away with indignant protestations. The tits, when quite small, were odd-looking things, with triangular heads out of proportion to their tiny bodies; but as their blue and gold plumage developed they became lovely little creatures. There were seven of them in all, and when they were fully fledged our minds were much exercised as to how the mother bird *would get them out of the barrel!* This problem, however, remained for us unsolved, for, coming one morning to inspect the nest as usual, we found it empty. The seven little tits had all got out, but whether by their own exertions or dragged forth by their energetic parents we should never know. One poor little tit we found dead on the pathway, and as its neck was pierced, apparently by some sharp instrument, we conjectured that its Spartan mother, finding it weakly, had sternly pecked it to death. The remaining six were flitting about the branches of a neighbouring tree, and were seen for some days afterwards, together with the parent-birds, who directed their movements with shrill cries of "tit, tit, tit."

Birds, as is well known, grow very confiding at the breeding season. We had frequent occasion to note this, and in some cases the "confidence" amounted to sheer impudence. A burglarious blackbird, for instance, had the cool assurance to build her nest in a conspicuous position, close to a strawberry bed, apparently for the express purpose of having a supply of wholesome, appetising food within easy reach! Three wrens also built in more or less exposed situations; but this was most unfortunate, for the nests were all deserted before any eggs were laid, owing doubtless to the too lively interest taken in them by passers by. It is, indeed, fatal to look often into a nest or handle the eggs until the full number have been laid and the bird begins to sit. The curiosity of would-be naturalists stifles many a promised brood, and we found that the best plan for the security of a nest was to confide the secret of its whereabouts only to one or two trusty friends. Happily the birds that built in our garden brought their labours for the most part to a successful issue, and by the end of June our trees and hedges were peopled with a multitude of tiny twitterers. It is delightful to watch a brood of young birds exercising their new-found powers of flight. We enjoyed this pleasure one sunny afternoon, seated under the shade of a tall old fir tree. In the branches above were a troop of young linnets, hopping and flitting from spray to spray, incessantly in motion, and gleaming in the sunshine, or disap-

pearing with kaleidoscopic effect. It was a charming picture of careless joyous life, irresistibly recalling Coleridge's lines :

> "O happy living things, no tongue
> Their beauty could declare ;
> A spring of love gushed from my heart,
> And I blessed them unaware."

We did not find a robin's nest. This was somewhat strange, as there were several robins about the garden, including a specially tame one who used to come close to us and pick up crumbs when we were having tea on the lawn. On the other hand, we found a far rarer thing, a nightingale's nest, with three young ones, carefully concealed in a hedge, close to the ground. Starlings built in the hollows of old apple trees ; when the eggs were hatched the incessant chattering of the young soon betrayed their whereabouts. Sparrows' nests were, of course, plentiful. One ingenious sparrow built in a cavity of an old wall, the entrance to which was so small that a hand could not be inserted, and unless the wall were pulled down the nest was safe from all intrusion. In the field and orchard were four ground nests—two larks' and two meadow-pipits'. One of the latter—with six fledglings—was discovered just before the grass was cut for hay, and in order to save it from disturbance, a fairly large space all round it was left uncut till the birds had flown. We visited this nest now and then, and found great pleasure in watching the six fluffy little things, as they lay there with gaping beaks and heaving breasts, in the full blaze of the June sun. We wondered how they could stand such intense heat, their only protection being a tall, wavy tuft of grass that bent over the nest like the hood of a cradle. They throve, however, and grew apace, till the nest could hardly contain them, in fact, they only *just* fitted in! At last we felt that if one of them did not soon make a move there would be general suffocation, so we gently pushed the biggest out of the nest. To our amused surprise he crept away and in a few minutes the others all followed his example, and never returned to the nest again! We always feel that we gave these little meadow-pipits their start in life.

Several nests were only discovered late in the season, long after the young birds had flown. Among these was a lovely little structure made of wool and thistle-down, firmly planted in the fork of a young pearmain apple-tree on which still hung a few deep crimson fruits. The materials of the nest and the presence of thistles in its neighbourhood led us to suppose it must be that of a goldfinch, that bird's penchant for thistle seeds being a well-known fact. Finally, we must not omit to mention that two pairs of swallows built quite late in the summer, under the eaves of a roof recently erected over the front part of the house. The nests were made entirely of clay, beautifully modelled, and in some wonderful way glued firmly to the smooth surface of the stuccoed wall. It was delightful to watch these birds as they circled gracefully to and fro near the nests, and at

last after much poising and fluttering, darted into the tiny holes that formed the only entrance. It was already the end of August, and we wondered whether the broods would be fledged in time for the general flight to a warmer clime; we hardly think this could have been the case, and they must be hibernating somewhere in the neighbourhood. We hope that next year some swallows—perhaps the same as in Hans Andersen's story—will build again under our eaves and bring us luck; but this they must do if they come at all, for the presence of these beautiful birds is itself a piece of good fortune surpassing mere worldly prosperity.

X.

BIRDS IN NORMANDY.

IT was on the evening of September 16, 1896, that I and several others descended from a stuffy second-class carriage at the little station of Pontorson, *en route* for Mont St. Michel. The journey had been through exquisite scenery, past fields of buckwheat, cut and drying in the sun, with stalks of a most gorgeous crimson—past orchards full of apple-trees loaded with fruit equally magnificent in colouring—past tiny villages and large towns—and in all of these the ubiquitous magpie. Perhaps the quantity of these birds in France has something to do with the striking lack of small birds of every kind; even sparrows seemed comparatively few in number, and of small finches, &c., we had noticed none, at any rate from the train. We were glad to stretch our cramped limbs a little before ascending to the roof of the remarkable vehicle which transports travellers, in search of the picturesque and unique, from Pontorson to the famous Mount. Our road thither lay at first through pastures surrounded by thick wall-like banks of sods, with a row of poplars planted along the top of each, and every field had its pair of magpies, walking on the grass beneath the bank, then springing on to it and displaying their magnificent plumage in a way which seemed to show their consciousness of its beauty. Sometimes one of them would alight on the head or body of a cow lying placidly chewing its cud on the soft emerald grass, and the cow seemed to treat it as a matter of course, and did not stop for a moment in the exercise of its ruminating jaws.

Further on we passed some large marshes through which runs the little river which divides Normandy from Brittany, and here I noticed some gulls—blackheads, and I think common gulls, while in a shallow pool by the roadside a party of Ray's wagtails were tripping about flirting their tails incessantly. There is no more restless bird than a wagtail; I almost think that the secret of perpetual motion is enshrined somewhere among the muscles which govern those long, slender tails of theirs. The hedges of tamarisks bordering the road were in late blossom, and now and

then I saw a butterfly, but of what species I cannot tell, being, alas! no entomologist.

The causeway, leading to the Mount across the Grèves, those treacherous sands which have proved the burial-place of so many, is about a mile in length, and flitting among the stones, which plentifully bestrew its sloping banks, I saw several wheatears. To our right flowed the Couësnon sluggishly among the sands in its channel marked by posts like exaggerated birch-brooms with very long handles fixed head upwards into the artificial stony banks between which, at low tide, the river runs. The tide was out then, and a broad sandbank in the middle of the river was occupied by a party of gulls, common and lesser black-backed, dabbling in the water and running to and fro by the tiny ripples. And the shore shooter was, unfortunately, not absent, for we passed a stout Frenchman with a cartridge belt buckled tightly over a black coat, carrying his "fusil," the whole crowned by a black stove-pipe hat. He took no notice of the gulls, however, and his capacious game bag looked remarkably flabby, so we hoped that for that day at least the patron saint of *Le Sport* had proved unpropitious.

Before us was the Mount, that mysterious rock, which once seen can never be forgotten, rising crowned with its "diadem of towers" sheer out of the shuddering Grèves. The causeway ends in a blank, frowning wall, and we made our way on a sort of wooden landing-stage to the gate by which alone entrance can be gained to Mont St. Michel, and which must, I should think, in high tides be entirely under water. Our rooms were soon secured, charming ones in the Maison Rouge, Mme. Poulard Aînée's ideal *dépendance*. From my balcony I witnessed a magnificent sunset, and then after a delicious dinner we retired to rest. I woke very early next morning, and the door on to the balcony being wide open I lay and watched the dawn. There were delicious twitterings and cries of birds coming up from the sands below, which lay a sheet of cornflower blue beneath the primrose morning sky, and presently a heron lit within my range of vision and began fishing in the shallows of the Couësnon. I got my glasses and watched his every movement with delight, and in a moment another bird alit where I could see, and a splendid curlew stood revealed by my field glass. This was too exciting, and I hurried on my clothes and went out on to the balcony, from which I could see several parties of dainty seabirds bathing in the shallows and flying, with soft, musical calls and whistles, backwards and forwards along the waterside. I identified common and lesser black-backed gulls, curlews, and oystercatchers, and there were numbers of smaller waders, which I could not see with certainty. The heron was still fishing, waiting for his breakfast in a calm and stately pose, varied by lightning but ungainly darts when his prey came within reach. I watched all these proceedings till breakfast time, during which meal I heard a chiffchaff in the plane trees on the terrace.

While patrolling the streets afterwards we found in a shop two curlew sandpipers, imprisoned in a basket covered with netting. Beautiful little birds they were, fighting desperately for their liberty. They had been caught in a net the night before, and their captors were proposing to sell them as slug destroyers, to be pinioned and put in a garden. They seemed quite uninjured, so we bought them for the magnificent sum of two francs, and taking them to the shore set them free. Poor little birds! they instantly rushed to the riverside and drank thirstily great gulps of the cool water. One soon flew away and joined a flock of birds on the sands in Brittany, but the other seemed weaker, and a fisherman, who had not seen us free them, ran after and caught it by the wing; we again bought it off, and he promised to leave it, assuring us that it would soon get strong and fly away, which greatly relieved our minds. He said that they often caught such birds in nets, and that it would have been "très bon à manger," a fact which we did not attempt to dispute.

I saw no other birds of interest during our stay of three days, and only a couple of jays and a green woodpecker on our return drive to Pontorson, but even what I did see convinced me that Mont St. Michel is well worth a visit by the naturalist as well as the archæologist or artist. Of course it is not safe to walk on the sands alone—even the most experienced guides have been overtaken by disaster in the past, when guiding parties of tourists across the treacherous Grèves; but from the Mount itself a great deal may be seen by the traveller who has a good field glass in his hand, and in his heart a genuine love of the "dear old nurse," Nature.

M. L. A.

SHORT NOTICES OF BOOKS.

The Young Beetle-Collector's Handbook, by Dr. E. Hofmann, with an Introduction by W. Egmont Kirby, M.D.; illustrated by 20 coloured plates, comprising over 500 figures, 178 pp. Price 4s. 6d. (London: Swan Sonnenschein & Co.) This little volume is well bound and well printed, of a convenient size, and may be safely recommended to the notice of those young collectors who are in want of a book that is not burdened with a great many hints on collecting, and who are likely to be satisfied with the means of ascertaining the scientific names of some of the larger and more showy species in their collections. Dr. Kirby has succeeded in telling them in a single page or so of the introduction all he considers it needful to know about "the habits of beetles and how to catch them," while in an equal amount of space he teaches them how to kill beetles. The book contains over 500 figures of Coleoptera, including both British and non-British species. Many of the larger figures are sufficiently true to nature to enable the young collector—while making due allowance for the artist's ignorance of the anatomical structure of a beetle—to identify the species without referring to the text except for the purpose of finding the name corresponding to each particular figure. Interesting bits of information are given in the text under the names of species, genera and families, although apparently not intended to assist materially the collector in naming and classifying his captures. Under *Carabidæ*, for example, he will learn that "This is a large family, the members of which

have long legs, run quickly, and are carnivorous in habits. Black is the most common colour among them. They hide under stones, moss and bark," &c. Some of the statements made by Dr. Hoffmann are slightly misleading and seem to betray a limited experience in collecting British beetles. Thus he says of the species of *Notiophilus*, "they frequent damp localities and live under stones," and "*N. aquaticus* is the commonest of the five British species." Now it so happens that one species, *N. biguttatus*, which we believe to be by far the commonest of the five, may be found on any warm sunshiny day running over the flower beds in almost every British back garden. We have noticed also in the text a few careless mistakes which, however, we are glad to think will mislead no young collector. The thorax of a beetle is, we read, "divided into three segments, fused together"; "the maxillæ of *Lucanidæ* are generally large and projecting like antlers," and in the genus *Procrustes* the "front tibia" are furnished "with three expanded joints in the males," while under the genus *Triplax* we have this curious fact stated—"antennæ with three terminal joints."

With what object so many of the smaller species of beetles are supposed to be represented on the plates of this book, it is difficult to conjecture, for we can hardly imagine there was any desire to encourage the passing craze for guessing at picture puzzles, especially as we do not find that prizes are offered for the best solutions. C. J. G.

THE name of the White Knight's song was called "*Haddocks' Eyes*," the name really was "*The Aged, Aged Man.*" The *song* was called "*Ways and Means*," but that's only what it was *called*. The song really *was*, "*A-sitting on a Gate.*" Poor Alice was quite bewildered by this precise discrimination insisted upon by the White Knight, and she would have been equally puzzled by Mr. Walker Miles's new little pedestrian guide-book. The name presumably is correctly stated on the title-page, but it is called otherwise on the cover. The book is *called West Kent Appendix, No.* 2, but it really is *Field-Path Rambles, Series xiv.* However, Alice will probably get the right book if she asks for *Along the Medway* (R. E. Taylor and Son, 19, Old Street, E.C.). It costs but sixpence, and describes a number of delightful walks in the neighbourhood of Tunbridge Wells. The routes are described in a clear and practical manner—Mr. Miles's own invention—which has repeatedly been praised in this Magazine, and which is a notable contrast to the perplexing titles of the book itself. A. G.

The Country Month by Month, by J. A. Owen and Prof. G. S. Boulger, with notes by Lord Lilford. London: Bliss, Sands & Co. [no date], in 4 volumes, 3s. 6d. each. While this work was passing through its first edition in monthly volumes, we took frequent occasion to refer to it in terms of praise, and we are glad to welcome its re-issue in a new form. Gilt edges and pretty covers render the book additionally attractive, although we do not admire the division on the back of one of them of the monosyllable "spring" into two parts, "SPR- ING." Some notes by Lord Lilford, made when the book first appeared, are appended to each month, but do not add materially to the value of the work. They sometimes partake of the nature of question and answer. Thus Lord Lilford says, "Surely you cannot mean to say that nightingales feed on peas and beans?" To which Mrs. Owen replies: "I ought to have said they go to fields where peas and beans *are planted* in search of their food." This kind of thing seems to us unnecessary, but if corrections or additions were to have been made, we think it might have been well to take note of the suggestions we offered in our various notices of the book. None of these seem to have received attention; the volumes are simply reprinted, even the original pagination being retained. *The Country Month by Month* remains, however, the best book of its kind; a very little more care would have made it as good as it could possibly be.

Farm and Garden Insects, by William Somerville, D.Sc. (Man.), D.Sc. (Dun.), B.Sc. (Edin.), F.R.S.E., F.L.S.; with 46 illustrations. (Macmillan: 12mo, pp. 127, price 1s.) This is the cheapest little manual of injurious insects which we have seen, and being written by an author who appears to be well up to his subject, and is as comprehensive in its scope as its size will permit, it ought to have a large circulation. It is divided into nineteen sections; the first eight deal with general subjects relating to the characteristics and classification of

insects, their economic importance, and the operation of natural checks to their increase; the next eight deal with insects destructive to the most important orders and genera of plants; while the last three include insects injurious to various garden plants, and to farm animals; and an appendix, including injurious anthropodes that are not true insects. W. F. K.

The Culture of Vegetables for Prizes, Pleasure, and Profit, by E. Kemp Toogood, F.R.H.S.—This little work contains practically everything that one would be likely to want to know in connection with the culture of all kinds of vegetables. Under each subject notes on the soil, planting, manure, and general treatment are given in a form at once easily found, full of information, and yet commendably brief. Numerous illustrations grace the book, and will doubtless be appreciated by those who endeavour to make the real objects coincide in appearance with the artist's productions. Following a few pages of matter at the beginning (which will repay for reading) dealing with the soil, rotation of crops, manures, &c., each vegetable is afterwards treated in alphabetical order, and this is obviously convenient. Although nominally treating of vegetables, we notice one or two subjects (*e.g.*, strawberries) are dealt with which most people regard as something else. But as there is no harm in giving good information, it would be ungracious to object to the introduction of these, more especially as their culture is practically mixed up with that of vegetables proper. J. W.

The Dahlia. (Macmillan & Co., 1897). 1s. This handy little volume of eighty pages is the outcome of the combined labours of five dahlia experts, who have treated their subject from every point of view. When it is stated that special attention has been given to the history, botany, propagation, culture, exhibition, and future of the dahlia, it will at once be evident that a great deal has been compressed into a little space. Indeed, almost the same ground has been traversed as that of the Dahlia Conference held at the Royal Horticultural Society's Gardens at Chiswick in September, 1890, the papers which were read on that occasion forming no inconsiderable portion of vol. 13 of the *Royal Horticultural Society's Journal.* As a practical little handbook of the dahlia, Messrs. Macmillan's publication may be recommended.

J. W.

SELBORNIANA.

Cats and Young Birds.—One of the chief pleasures to be derived from the possession of a large, well-timbered garden is undoubtedly the opportunity it affords of observing the birds during the nesting season, but the pleasure of so doing is often sadly marred by the depredations of prowling cats, and it is distressing after watching the building of nests and the hatching of the young to find whole broods destroyed in this way. Mrs. Brightwen in her very interesting article on squirrels last month, truly remarks that the one condition for the successful observation and encouragement of wild life near the dwelling is that no dog or cat be kept. It is not, however, only the household mouse-catcher that gives trouble. On her some degree of restraint might be imposed. But unfortunately, most country gardens, especially if near a village, are open on all sides to these marauders. One is continually hearing the alarm note, indicating that a cat has been sighted by the old birds. Attention is drawn to the nest by the chirping of the young when being fed, and in their then helpless condition they fall an easy prey, and the whole family is doomed. Blackbirds and thrushes especially are frequent victims, owing to the comparatively low position of the nest. Can any reader give any practical suggestions for the prevention or mitigation of this evil? It is obviously out of the question to trap or kill the culprits, they are after all only following their natural hunting instincts, and no Selbornian would wish to destroy or injure any animal which is valued by its owners. One remedy would appear to be the provision of nesting boxes, of such form and in such position as to be inaccessible to cats, though the birds, in many places, do not seem, for some reason, to take readily to them, only one out of some five or six in my garden being at present occupied (by a pair of tits). Any hints on these points, from those having experience, would no doubt be valued by many.

W.

NATURAL HISTORY NOTES AND QUERIES.

Summer Migrants.—First appearances near Southsea, Hants: Wheatear, March 19; Swallow, March 23; Cuckoo, April 16; Nightingale, April 13; Wryneck, April 13; Nightjar, May 15. For the last six years I have had ample opportunity of observing the habits of nightingales, and can confidently assert that they utter a harsh croak on their arrival when alarmed, and this before commencing nesting duties. J. E. H. KELSO.

Double Birds' Nests.—One of the most common appropriations of the work of other birds is that of house-sparrows taking possession of house-martins' nests just before completed. Out of six nests built round my house this season five are occupied by sparrows, in which they build, or line with their own materials, thus making double nests. This circumstance was well known to Gilbert White over a century ago, and still it is followed out on exactly the same lines. In April a pair of swallows built a nest under an archway and then disappeared. I rather suspect they perished in the terribly cold weather for lack of insect life in the air, at any rate they have not been about the premises since. A wren has just finished off the nest by putting a beautiful canopy on top. I say *a* wren because it was a male bird, by his merry song while about the business. I have seen a wren's nest built on a whitethroat's nest after the same fashion, thus forming a double nest. Two pairs of kestrels near here have taken possession of magpies' nests this season, after being built up, and it is a common occurrence for stock-doves and ring-doves to appropriate old magpies' nests. Last year a pair of partridges shared the same nest while laying with two hens near a farm-house, but the disturbance proved too much for the partridges.

Astwood Bank, Worcestershire. JAMES HIAM.

Great Northern Diver (p. 78).—In response to Mr. Aplin's remarks, I have written to my friend who several years ago assured me he had taken the eggs of this bird in the North of Scotland. He has left this neighbourhood for some time, and during his many changes of residence the eggs have disappeared. His answers to my enquiries are not conclusive, and I must abandon a belief entertained for years. EDMUND THOS. DAUBENY.

ANSWERS TO CORRESPONDENTS.

G. S.—Both are *Lepidium campestre*. Please read Rule 1.

E. M. P.—The specimens were not determinable.

C. G.—Yes, the two plants are the same, but *Impatiens Roylei* is the correct name, as there is another and earlier *I. glandulifera*. It seems to have been introduced about 1840.

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1. All communications for NATURE NOTES must be authenticated with name and address, not necessarily for publication.

2. The return of unaccepted contributions cannot be guaranteed. We cannot undertake to name specimens privately, or to return them.

3. All communications for the August number must be in the Editor's hands by the 10th of July.

4. Communications for NATURE NOTES should be addressed to the Editor, JAMES BRITTEN, F.L.S., 126, Kennington Park Road, London, S.E., as should specimens for naming, books for review, &c. The Editor cannot undertake to reply privately to questions.

5. Letters connected with the Selborne Society, as well as all inquiries as to the supply of NATURE NOTES, and subscriptions, should be addressed to the Secretary of the Selborne Society, A. J. WESTERN, Esq., 20, Hanover Square, W.

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ANNUAL MEETING AND CONVERSAZIONE OF THE SELBORNE SOCIETY.

THE annual meeting of the Selborne Society was held, as our readers are aware, on May 20, and was as usual very successful. There was a large attendance, and at the close of the meeting, which is fully reported below, those present found much to interest and amuse them in the programme of music provided, in the Short Talks on congenial topics, and in the very interesting series of exhibits. Once again members of the Royal Microscopical and Quekett Societies added greatly to the pleasure of the evening by means of their microscope. Mrs. G. E. Marindin contributed a very complete and charming series of wild-flower studies in water-colour, and other exhibits of interest to Selbornians were kindly lent by Professor Henslow, Messrs. F. W. Ashley, F.Z.S., R. Marshman Wattson, Mrs. Hensley, Miss F. E. Pilkington, Mrs. E. Phillips, and others.

The President, Sir John Lubbock, in moving the adoption of the report, said: The Selborne Society is especially necessary in a populous country like our own. Our rarer animals and plants are gradually disappearing. Parliament has done what it could in passing wise laws, and County Councils are doing their best to carry them into effect. They can, however, effect comparatively little unless they have the general support of the community. We hear a good deal about the love of Nature, but it often takes an unfortunate form. It was said of King William Rufus that he "loved the tall deer like a father;" but what he loved was killing them; and I am afraid that the love of animals shown by many people is of that description. Again, many show their love of flowers by gathering them, sometimes getting very soon tired of them and throwing them away. I have often been asked why I do not gather flowers when I am so fond of them; but I always say that is the very reason why I prefer to leave them where they are growing.

The use of the word sport is, I think, unfortunate. A great deal more interest is to be got out of animals by keeping them alive than by putting them to death. Only recently a friend of mine saw seventeen nightingales stuck up on a gamekeeper's cottage, and when he asked the gamekeeper why in the world he killed these charming little birds, the man said that they made such a noise at night that they kept his young pheasants awake. At the same time it must be confessed that the strict

protection which is necessary for the preservation of game does also to some extent protect other birds, and has, therefore, at any rate, that advantage.

It is very remarkable, considering how long we have lived on this globe with other animals and plants, how little we know about them, and yet there is intense interest in unravelling the secrets of nature. I do not allude to difficult problems which require physical laboratories and observatories, nor to those which can only be solved by technical study. The formation of the blood, for instance, is still a mystery; and it is certainly an extraordinary thing, considering the great importance of blood in the animal system, that we do not yet know how or where it is produced. There are many other questions of the same kind which might be mentioned, but which, though of great importance, hardly come within the range of such a Society as our own.

Even, however, as regards the habits and life of our commonest animals and plants, there are still an immense number of interesting problems remaining to be explained and dissolved. Perhaps the commonest of all English plants is *Pleurococcus vulgaris*, the little alga or seaweed which covers the stems of trees, palings, and other woodwork of a similar character with a coating of green. It consists of small rounded cells, sometimes quite separate, sometimes grouped together in little packets of two, four, or eight. These divide and sub-divide and multiply in this manner. But obviously this is only a part of the life history of the plant. Like the rest of its family it probably at certain times and under certain conditions produces spores, but all this part of its life history is quite unknown. In the case of the common mushroom, again, the spores are of course enormously abundant, and yet nothing is known about their germination.

Peas, beans and other leguminous plants almost invariably have swellings or tubercles on their roots. These are supposed to be produced by bacteria, and when such tubercles are present great quantities of nitrogen are accumulated. An important result of this is that leguminous crops are supposed actually to enrich the soil. In Germany in many places the yellow lupine is especially grown for no other purpose but to be ploughed in and thus improve the soil for other crops. These bacteria are therefore of great importance and abundance, but the rest of their life history is quite unknown. The relation of these bacteria to the lupines and their whole action is still very little understood.

As regards the animal kingdom, many of the most interesting recent discoveries have been made with reference to the commonest species. Until within the last few years the male of the gallfly which produces the common King Charles oakapple was unknown. It is now found that the species goes through a sort of alternation of generations, the autumn brood being quite different to that of the spring. In bees and some allied insects

it has recently been discovered on what the sex of the young depends. They are almost the only animals of which this can be said. So again in the case of eels. It was long ago mentioned by Aristotle that nobody knew how or where eels bred, and certainly no one had ever seen, until in the last few years, the egg of the eel, or the young eel just emerged from the egg. It has now been shown, mainly by the researches of Grassi, that the history of the eel is in fact the reverse of that of the salmon. The salmon comes up into our rivers to breed, the eel goes down into the sea and breeds in water of great depth.

All our ponds are rich in different species of rotatoria, the common rotifer itself being very abundant, and yet I believe up to the present time no male of the genera philodina, rotifer, calledina or admeta has yet been discovered.

Many other similar instances might be mentioned, but I must not attempt to occupy your time by doing so. These few, however, suffice to show how many interesting problems in natural history yet remain to be solved.

The adoption of the report was seconded by the Earl of Stamford, who said: I had the pleasure last year of saying a few words about a bit of legislation in which I was interested in regard to the protection of birds. I will just say a word or two on that point in seconding the adoption of the report. It was my happy duty to introduce a Bill into the House of Lords to make the lot of the professional bird-catcher a much harder one than it had been before. Unfortunately the Home Office and the public generally were not prepared to accept all the restrictive legislation sketched out in that Bill, but a certain number of the provisions went through and passed both Houses, and it certainly is a little more difficult time which the professional bird-catcher will have now. This shows how necessary it is to have public opinion at the back of the law, and therefore I welcome the clause in the report in regard to the future efforts of the Selborne Society in the delivering of lectures and essay-writing by children. Something may be done with adults by arousing their interest, but by far the most hopeful direction for our efforts lies in catching the young citizen, instructing him or her in the interesting study which surrounds us in beast and bird-life, and further by diffusing instruction as to the way in which that life may be protected. There is plenty of legislation for the purpose, but it needs backing up by intelligent public opinion. In this direction, in interesting the children of the country in what has been done and what may be done, lies our great hope.

I have heard it said that the continent is a terrible example to us in regard to the neglect of bird-life. I was pleased to come upon a rather encouraging experience in France a few weeks ago. I had always had an idea that France is silent so far as birds are concerned, since all of them had been used for the purposes of the table, and it was a very pleasant experience, therefore, in making an expedition over the battlefield of Cressy, to hear the larks, and

be cheered by their voices. We may hope that public opinion in France is being awakened in this matter, and that increasing respect will be paid to such considerations as we Selbornians are so anxious to disseminate. It is encouraging to hear, as I have done, even this afternoon, that the rarer species are increasing in England. I am told that Savernake Forest has been made a sanctuary for birds, and no slaughter will be allowed within that area. We have an encouraging task before us, one in which advance is being made, and it is a hopeful task which we are undertaking.

So much for that part of the subject. I shall venture to touch on a rather thorny place in reference to a point which has struck me often. It is a question which will raise strong feelings on both sides, that is, our duty to natural scenery, and especially in connection with the modern pastime of golfing. I have noticed that in many districts those delightful commons and open spaces which have been free for the enjoyment of the many, have had that enjoyment restricted in the interests of the few. It is very difficult to speak at all decidedly upon this point when we remember the benefit the game of golf is to those who are shut up in towns and who can in so short a time derive enjoyment from that form of sport; but I have noticed how very much some of these beautiful spots have been damaged in their amenities by the introduction of that game. It was only a few months ago that I went over a spot referred to in this month's NATURE NOTES, namely, Babbicombe Plain, and found that free passage over that beautiful place has been abridged considerably. I think it is a matter which requires consideration and attention. I have always been a little held back from keen pursuit of this game by these considerations. What right have we to restrict the enjoyment of the many in the interests of the few? I have talked over the matter with some friends who are keen golfers and may speak with authority, which I cannot, and they admit that there is a good deal in these considerations. They say in Scotland that the game is a simple, inexpensive one, in which the delight is shared universally. In England the tendency has been to make it expensive and so interest only the few. In Scotland the effect on the character of the country people is good enough, apparently, but in England, where we have rich people playing the game, the effect on the country lives is confessedly not good. We feel, therefore, that those who have keen, legitimate interest in golf have some points to consider. They must consider whether arrangements can be carried out whereby the public enjoyment shall not be diminished, and the effect on those who are called on to help in the game shall be a good one instead of a very doubtful one indeed.

Further, as I have said before, comes the question of diminishing the beauty of the landscape. We have a duty to wild and beautiful nature, and in the interests of the best game possible we have no right to interfere with the face of nature in

the way of seriously diminishing the beauty of the landscape. I have taken an unpopular line. I have put before you considerations which are unpopular. I do not propose a solution, but suggest these points for your very serious attention, and with these remarks I have much pleasure in seconding the adoption of the report.

Mr. J. L. Otter said: Amongst the many subjects of congratulation the financial property of the Society cannot be included. It is an unfortunate thing that we, as a Society, have always been rather behindhand in our payments. Our expenditure is not large, and every item of it may be called necessary expenditure if we are to maintain a moderate efficiency. On the other hand our members do not decrease, but increase, and the numbers are large and satisfactory. I am afraid the reason of the deficiency is that the members do not give enough. When we began the minimum subscription was 2s. 6d., and there were few or no expenses. Afterwards this sum was found to be inadequate, and a few years ago the subscription was raised to 5s. for new members, though it still remained at 2s. 6d. for existing members. The privilege has always been afforded to all members of subscribing to an unlimited extent. I am sorry to say that few availed themselves of that privilege, and a very large number of our members still subscribe only the small sum of 2s. 6d. It was part of our scheme that the Society should be a catholic society—open to almost the very poorest; and for that reason the minimum subscription, entitling to the full rights and privileges, was made as low as possible. But the low minimum subscription was not, is not, and cannot be enough to carry on the work of the Society efficiently. It was therefore intended and contemplated as a thing that should happen that the subscriptions of poor people should be supplemented by the larger subscriptions of those better able to afford more. The member who subscribes the large sum of 2s. 6d. gets a copy of NATURE NOTES all the year round, which actually costs us 2s. 2d., money out of pocket. Now that leaves us 4d. wherewith to carry on the general work of the Society. One shilling a year from each of our members in addition to their present subscriptions would put us in a happy position. The year before last there was a deficiency of over £90. That was reduced to £54 last year, chiefly by the extraordinary energy of the secretary in getting in arrears, but this year again there is a large adverse balance, though the arrears are heavy. I do not know exactly what they are, though it will be stated as far as possible in next month's NATURE NOTES; but apparently the deficit will be something between £90 and £100. This is a small sum in itself, but a large one considering the financial scale on which we work. It is about one fourth of our expenditure. This condition of things must be stopped. I am not here to-night with any definite proposal, but I hope that some practical proposal will be made before

the end of the year. It is not only that there is difficulty in meeting our small expenses, but we are crippled in our work of development by want of the sinews of war. It is really a question for you. Do you care for the work? Sir John Lubbock has reminded you that our country is small; and that railways, factories and other buildings are pressing more and more on the rural parts. But, though small, our country is rich in the variety and distribution of wild species, and in natural beauty. Do you desire to preserve this heritage, so far as is possible, not only for yourselves, but for posterity? If so, do you think that this Society is, on the whole (whatever ineffectiveness and futility there may be in some particulars), carrying on a useful work to that end? If the answer is in the affirmative, it is surely but a small thing to ask that the aid required should be freely given.

Mrs. Edward Phillips: Sir John Lubbock, Ladies and Gentlemen,—I avail myself gratefully of the privilege of addressing you to-night, and I venture to do so in the presence of far better speakers because I think I may possibly represent the feelings of a portion of those present who are, like myself, working quietly in the ranks of the Selborne Society, in which I have been interested ever since its commencement by Mr. and Mrs. Musgrave.

Sir John Lubbock has ably advocated the extension of education, in which we all heartily concur, but some of us anxiously hope that the educators will not forget what Hiram Powers, the American sculptor, declared to be the great need of his country, and which is the great need of all countries—the education of the heart.

The exact length of a bird's wing, the precise conformation of its beak, and the varieties of each species as shown in the stuffed birds of a museum, will not alone lead up to, much less supply the place of, the loving appreciation of living beauty which comes from watching natural objects, the ways of birds for instance, or indeed of any unmolested wild creatures, with a view to their preservation.

I would not seem to speak as if scientific acquirements were incompatible with keenly humane feeling. On the contrary, it is the most learned ornithologists who have most cordially seconded the efforts made by simple bird-lovers to stay the slaughter of useful and beautiful birds for (so-called) decorative purposes. Professor Newton was one of the earliest supporters of the Society for the Protection of Birds, and to him we still look for counsel and encouragement. The late Lord Lilford was another staunch friend, and some persons present will perhaps remember his indignant denunciation of the "destruction of birds for the disfigurement of women's heads."

Unhappily, few women regard feathers as unbecoming from any point of view, and even the wearing of whole carcases appears to be again coming into vogue, since the newspapers

recently described a popular royal duchess as wearing a Bird of Paradise in her bonnet.

On the other hand it is said that milliners find that their customers are beginning to be troubled with scruples, and statements are consequently circulated as to the large numbers of artificial aigrettes and other feather decorations prepared from fowls of various kinds killed for food. It has even been asserted that an unlimited supply of cast egret feathers in perfect condition may be had for the picking up on the walls of China!

These statements have been amply refuted by the highest authorities, but I am not aware that any collection of statistics exists calculated to convey an adequate idea of the rate at which some of the fairest species of birds have been, and are now being, destroyed by plume hunters. I have brought with me to-night a crowned Victoria goura pigeon, some humming birds and other specimens, from an auction of nearly half a million birds held in London on the 13th of last month (April).

The three consignments which I saw as they came from the docks piled up in huge crates consisted of:

Osprey plumes	11,352 ounces.
Vulture plumes	180¾ pounds.
Peacock feathers...	215,051 bundles.
Birds of Paradise	2,362
Indian parrots	228,289
Bronze pigeons, including the goura	1,677
Tannagers and sundry birds	38,198
Humming birds	116,490
Jays and kingfishers	48,759
Impeyan and other pheasant and jungle fowl... ...	4,952
Owls and hawks...	7,163

A similar sale took place in February, and others were to follow in July and October in the same place. At the auction of April 13, a Bird of Paradise of good quality sold at 25s., a Victoria crowned pigeon at 5s., humming birds 4d. to 6d. apiece, according to quality. The price realised for the egret plumes I do not know, but it must have been large, as very high payment is required by the hunters on account of the permanent injury to health, resulting from their exposure to malaria in their exterminating work, which has to be carried on further and further afield as the process of devastation extends.

According to the statement of a buyer in the *Daily Telegraph* last December, the fibre-fine plume of the egret then stood at £4 10s. an ounce, but had not long before touched £10. In concluding these remarks, which have already been longer than I intended, I ask leave to read an extract from a collection of papers presented to an American Congress on Ornithology, and recently sent to Professor Newton, who has marked the following passages, in which Mr. J. Gilbert Pearson thus describes his own experience in Central Florida:—

I visited a large colony of herons on Horse Hummock on April 27, 1888. Several hundred pairs were nesting there at the time. Most of

them were little blue and snowy herons, with some white egrets, Louisiana herons, and black-crowned night herons. When quite close to the breeding-grounds I climbed a tall gum tree, and being partially screened by the thick foliage was able, unobserved by the birds, to survey the scene at leisure. The frail nests of twigs were placed in buttonwood bushes and willow trees, in and around a little pond in the hummock. There were but few young; most of the nests contained three to five blue eggs.

Three years later I again visited the heronry at Horse Hummock, found the old gum, and climbed among its branches. But the scene had changed. Not a heron was visible. I discharged my revolver, but the answering echoes and the tapping of a woodpecker were the only response. The call had come from Northern cities for greater quantities of heron plumes for millinery. The plume-hunter had discovered the colony, and a few shattered nests were all that was left to tell of the once populous colony. The few surviving tenants, if there were any, had fled in terror to the recesses of wilder swamps. Wearily I descended from the trees to find among the leaves and mould the crumbling bones of slaughtered birds.

A few miles north of Waldo, in the flat pine region, our party came one day upon a little swamp, where we had been told herons breed in numbers. Upon approaching the place the screams of young birds reached our ears. The cause of this soon became apparent by the buzzing of green flies and the heaps of dead and bleeding. The smouldering embers of a camp-fire bore witness to the recent presence of the plume-hunter. Under a bunch of grass a dead heron was discovered, from whose back the plumes had not been torn. The ground was still moist with its blood, showing that death had not long before taken place. The dirt had been beaten smooth with its wings; its neck was arched, the feathers on its head were raised, and its bill was buried in the blood-clotted feathers of its breast, where a gaping wound showed that the leaden missile had struck. It was an awful picture of pain; sorely wounded this heron had crawled away, and after enduring hours of agony had died the victim of a foolish fashion. Young herons had been left by scores in the nests, to perish from exposure and starvation. These little sufferers, too weak to rise, reached their heads over the nest and faintly called for the food which the dead mother could never bring.

It is bad to see such sights from any cause, but when all this is done merely to gratify fashionable women's vanity, it becomes still worse. These are but instances of the destruction of bird-life all over the State. Unless something is done to stop this awful slaughter, it is only a question of a few years before the herons, not only of Florida, but of the whole South, will be exterminated.

Women who know of the cruelty necessary to procure the feathers they wear on their hats should stop wearing them, and exert their influence to make other women see how cruel and wicked they are.

May God's blessing rest with all who strive against this sin!

The Hon. J. Scott-Montagu, M.P., said that he felt the want of education in Natural Science was a serious one, and that we should devote our energies to the education of the young. In these days of high pressure it would be better if we had a less complex form of instruction and taught more about nature. Lectures such as have been given by the society on bird life ought to be given in all schools, and some facility might be afforded for this class of study also at the Universities, where at present the student has no opportunity of studying nature unless

he be in one of the biological laboratories. With reference to the controversy about women wearing feathers, he had been in South Africa and seen the ostrich farms, and he could assure the ladies present that no cruelty was attached to this trade. The feathers were carefully cut off, and if they were not thus cut the quills were shed in the ordinary course of nature when the bird moulted its feathers. With reference to the Chairman's discourse about eels, the eel was somewhat like a rabbit, since it had a burrow, and also somewhat like a bear in that it laid on a large amount of fat before hybernating till the spring. He had taken eels in this state in the middle of winter which, although in this lethargic state, were very excellent eating. In South Africa the birds and flowers were very beautiful, but, with few exceptions, they had no song or smell; and Mr. Rhodes had been a true Selbornian in that part of the world, for he had imported various kinds of singing birds. These had been placed on his estate and now thrived well, so that both the thrush and blackbird could now be heard within a few miles of Cape Town. Referring to oysters and their life history, the greatest foe to young oysters was the prawn, and many persons who did not like oysters would eat prawns, which were only concentrated oysters. The two great objects for which the Society was established was the cultivation of the habit of accurate observation, and the education of all classes of the people of this country to understand and respect nature.

Mr. R. Marshman Wattson said that a good deal of the work was done by the branches, of which there were about thirty-five, and it was to the branches that the Society looked, as the work to be done was often of a local character, in addition to which the branches took the subscriptions, as, according to the rules, they were not compelled to pay more than 10 per cent. of their gross receipts to the head-quarters, and often the Society did not get that; in fact, if all the payments due from the branches had been made, the Financial Report would have been very different. He thought the Society started with too many irons in the fire, and as there were now separate societies for carrying out some of the objects they originally had in view, we should devote our attention more to the study of living nature after the manner of Gilbert White. As for the prevention of the destruction of birds for their plumage, he had already given that up as hopeless, for in spite of all that had been written and spoken on the subject, he saw some eleven or twelve in that room wearing "osprey" feathers.

Professor Hulme, in proposing a vote of thanks to the chairman, said it was impossible to teach the children unless they had some one competent to do so. They must educate the teachers, for it seemed that unless she or he had the knowledge of nature born in them the present training would fail to give the necessary stimulus. Education would have to be carried a long way. He knew a lady who had a habit somewhat anti-Selbornian,

in that whenever she saw a cat or dog she would look for some missile to throw at it. When he begged to remonstrate with her she told him she did it on scriptural grounds, since "the fear of ye shall be upon all creatures." He cordially agreed with Mr. Wattson that they were trying to do too many things. By doing this they weakened themselves and other societies by mutually treading on each other's toes. He did not agree with some of the speakers in regard to the restrictive measures for the protection of plants and animals. There was a good deal of interest to be got out of a collection, and he did not see why, under certain limits, children should not be allowed to interest themselves in this way. He himself, when he had been walking recently in one of the London parks, found on looking at a notice board, that he was fairly within the reach of fourteen days' hard labour, having broken three rules, and picked a flower or two. He had recently lectured to an audience to whom he showed some flowers as specimens, and when the meeting was over he said anyone who cared to take them might do so. Immediately there was a rush, and the table was quickly cleared. He flattered himself that he had probably by this means implanted in some of those people a love of nature and plants which he should have lost without that stimulus. He would remind the friends that Savernake Forest is very near to Marlborough College, where there are some enthusiastic naturalists who have formed a good society in that neighbourhood, and they would need to be looked after. He differed entirely in regard to golf, and would say at once that the pleasure of the few must give way to the pleasure of the many. Sheen Common was a piece of wild woodland nature with its bushes and ponds, where at one time you could go rambling with much enjoyment, but now the golf mania had taken possession and you were looked on as an unmitigated nuisance for being there. They differed on many points, but they would all agree on this, that they pass a very hearty vote of thanks to their chairman.

The resolution was seconded by the Rev. H. E. U. Ball in a few happily chosen words, and was carried with acclamation.

Sir John Lubbock, in responding, moved the cordial thanks of the meeting to those who had in any away assisted in the evening's enjoyment, and the proceedings then closing members dispersed, some to listen to the music, others to listen to the "Nature Talks," which, by the by, were admirably illustrated with lantern views under the supervision of Mr. A. Ravenshaw, and others to find entertainment in the Microscopic Exhibition by members of the Quekett and the Royal Microscopical Society.

During the evening addresses were given by the Rev. H. E. U. Bull on "The New Forest"; Mr. R. Marshman Wattson on "Pond Life"; Mrs. Lemon and Mr. F. W. Ashley, F.Z.S., "Birds"; Mr. E. A. Martin, F.G.S., on "Selborne"; and an enjoyable musical programme was rendered.

REPORT.

THE Council of the Selborne Society has pleasure in presenting to the members its Report for the year 1896.

A new branch has been formed for the district of Portsmouth. Dr. J. E. H. Kelso has kindly undertaken the office of Honorary Secretary.

In accordance with the new rule adopted at the special general meeting, held on November 5, 1895, to facilitate the formation of junior branches at schools, the pioneer junior branch was formed at Dover College, under the secretaryship of Mr. Bernard F. Hall. During the past year other junior branches have been started at Bromley, in Kent, the Honorary Secretary being C. E. Hartley, Esq., M.A., of "Quernmore," Bromley; and at Hatfield, in Hertfordshire, the Honorary Secretary being the Rev. H. G. O. Kendall, of Orchard Cottage, Hatfield. The Council is anxious to encourage the formation of branches organised in this manner under the new rule, as it is believed that by this means the early study of natural history on the lines of the Selborne Society is fostered, and it is hoped that such branches may be formed in course of time either independently or in connection with existing school natural history societies, at many schools and colleges in every part of the country. Any member willing to undertake the formation of a new branch either for adults or juveniles is recommended to apply to the Secretary of the Society for information as to the rules. The new leaflet recently issued, entitled "How to Start a Branch of the Selborne Society," by Mr. Edward A. Martin, will be found useful.

The Council has to record the great loss which Selbornian interests have sustained by the death of William Morris, who was one of the Vice-presidents of the Society for many years.

The Council wishes again to impress upon each member of the Selborne Society the importance of making an effort to extend its scope and work. The good that has been done should be an encouragement to increase our efforts rather than an excuse for relaxing them. Many flowers and birds, once plentiful, are becoming scarcer every year; some of the most beautiful spots in our lands have been attacked by that vandalism which feeds on selfishness; whilst millions of birds, both common and rare, are killed annually for millinery decorations.

It is the province of the Selborne Society to endeavour to abolish these evils, and whilst any remain it has work to do. But its efforts in this direction must be practically futile if it is left to the few to make them. There should be no lukewarm members of our Selborne Society. Its objects are such that none can plead inability to assist. All cannot, of course, have equal opportunities, but all can foster and endeavour to spread the same keen sympathy with the beauties of nature and the life around us, and make known the existence and objects of our Society. The importance of adding to the number of members should not be overlooked, and if each member would obtain at least one recruit at the commencement of our new year, the actual doubling of our members would be only one of the benefits that would arise. The hands of the Council would be strengthened; the finances would be placed in a condition to enable the Society to take action where now it is compelled to remain inactive. Each new member becomes a centre from which may spring incalculable good to the objects we have at heart.

The evils we are combating are so great and widely spread that they can only be lessened by determined and continuous efforts, and the Council appeals both to branches and individual members to work with increased energy during the coming year.

The donations received towards the "Magazine and Leaflet Fund" have enabled the Council to reprint and issue various leaflets dealing with the several objects of the Society. Members are urged to distribute copies of the leaflets and prospectuses, as well as of *Nature Notes*, with a view of obtaining new members and extending the knowledge of the objects and aims of the Society. Application should be made to the Secretary, 20, Hanover Square, for leaflets and prospectuses showing the objects of the Society, details as to membership and the methods by which those objects can be attained, together with a list of officers, branches, and names and addresses of the local Honorary Secretaries. The publishers are willing to supply back numbers of the Society's magazine gratis, for distribution at local meetings, or to serve as specimen copies.

The Council again tenders its cordial thanks to Mr. James Britten, F.L.S., for the ability with which he has edited the Society's magazine, *Nature Notes*. The favourable notices and frequent extracts which are given in the press (the source being still, at times, not acknowledged) testify to the increasing value and interest of the magazine. The Council wishes also to thank the large number of members who have voluntarily contributed articles and notes.

The Society's Field Club organised last season a series of twenty-four rambles, which were very fairly divided between the north, south, and west districts. The numbers much depended on the popularity of the place visited, and the weather. Those in and near Epping Forest (Chingford, Loughton, Sewardstone Green, Chigwell, and Copt Hall) were much enjoyed; and those further afield, on the south side of London (Beddington, Carshalton, Purley Downs, Croham Hurst, Coulsdon, Addington Hills, and Elmer's End, Hayes and Keston Common) were exceedingly well attended.

There was a visit paid early in the season to Kew Gardens, conducted by Prof. F. E. Hulme, F.L.S.; and one from Gomshall Marsh to Chalk Downs, conducted by Prof. G. S. Boulger, F.L.S.; also rambles to Hadley Woods, Harrow, and Ruislip, Greenford and Northholt, and other places. Perhaps one of the most enjoyable afternoons spent was a visit to St. Albans Abbey. The Rev. G. H. P. Glossop, M.A., led the party round the Abbey, his remarks on its history and architecture, including the ingeniously atrocious restorations, being luminous and pointed. Mr. Page, F.S.A., also delivered an interesting address in the Abbey churchyard, respecting some excavations he had recently made on the spot, when he uncovered the foundation of St. Andrew's Church, built in the thirteenth century, but long since pulled down. St. Michael's Church, where Francis Bacon lies buried, and the ruins of the old Roman wall, near Verulam Woods, were also visited.

The season finished with a fungus foray through Wimbledon Common to Richmond Park, which the Field Club undertook in conjunction with the Lambeth Field Club, and which was most successful.

A collection of lantern slides illustrating Gilbert White's country has been purchased of Mr. Appleby, of Bath, and an arrangement has been made with the Society for the Protection of Birds, whereby the use of their admirable selection illustrative of birds and bird life has been secured for Society lectures. The Council would be glad to hear from any member who would be willing either to lend or present such slides to the Society.

A number of very successful lectures have been given on behalf of the Society during the year. The Council is greatly indebted to those gentlemen who have so willingly given their valuable services, and as the number of lecturers at present available is insufficient to meet all the

applications received, the names of any members willing to speak and lecture, especially out of London, will be gratefully received.

Many County Councils have taken advantage of the opportunity afforded to them of enforcing the Wild Birds' Protection Acts, by obtaining orders to allow the Acts to become operative within their jurisdiction. The enforcement of the penalty is left to the local authorities, or to private persons, and members are requested to strive to see that the orders obtained are duly administered.

In spite of all appeals to the contrary, the wearing of the feathers of birds, especially "ospreys" and birds of paradise, continues to prevail. The number of beautiful and useful birds annually slaughtered for bonnet trimmings threatens, and in some cases has already accomplished, the extermination of some of the rarer species. Yet, although it will scarcely be believed, women wearing ospreys attended this year a meeting, the object of which was to condemn the very practice of which they were guilty. In the face of this fact it seems almost hopeless to bring home to the minds of these ladies the decrease in the numbers of birds, caused by the practice in which they so heartlessly persist.

The need of such a Society as ours is increasingly evident. From New South Wales, from Tasmania, from the United States we hear that the native fauna require protection, and that the aid of legislation has been invoked against the indiscriminate destruction which goes on. Unfortunately, it is not only in these countries that the land is being denuded of its animals as well as of rare plants and insects. Both the Norwegian Government and that of the United States have established sanctuaries with excellent results, and such a course is being adopted in other countries. As suggested last year, such refuges are highly desirable in England. No better sanctuary could be found than the New Forest, at present the happy hunting ground of sportsmen, botanists, and entomologists.

A correspondent of the *Times* writes on this subject: "Possibly a few years hence the present craze for regarding everything wild as a proper subject for self-appropriation, for destruction or for the gratification of the vanity of the sportsman will have passed away, and our descendants will be wondering how we can have allowed a common inheritance to be lost by the selfishness of individuals. Surely the natural species of a country are as worthy of preservation as the west front of a cathedral or an historic monument; for are they not older than all buildings or all history? and alas when once destroyed can never be supplied."

Mr. C. W. Radcliffe Cooke, M.P., has asked the Society to assist him in the Institution of "Arbor Day" in England, for the double purpose of renovating Kentish orchards, and commemorating the long reign of the Queen. The institution of a fixed day in each year set apart for tree planting would, as it came round, remind us of a duty we owe to ourselves and posterity—to leave the land a little pleasanter and more fruitful than we found it. If Arbor Day prevailed, trees would speedily grace the landscape where now the land is bare. From the utilitarian point of view it may be urged that the institution would benefit the nurseryman, and the small initial outlay would in the case of fruit trees be quickly repaid. The planting by children would give them a personal interest in arboriculture and the ornamental appearance of their own village.

In America the observance of Arbor Day by the schools has been so successful that it has been suggested that a Bird Day, to be devoted to instructing the children in the value of their native birds and the best means of protecting them, might with propriety be added to the school calendar. Such a movement can hardly fail to promote the development of a healthy public sentiment towards our native birds, favouring their preservation and increase.

Several articles giving accounts of the efforts being made to secure the purchase, and dedication to the public as an open space, of Churchyard Bottom Wood, Highgate, have appeared in *Nature Notes*. The wood is the property of the Ecclesiastical Commissioners, who are willing to sell it for £25,000. Of this sum, £12,000 still remains to be made up. A joint Committee has been formed, to which the Society has elected representative members, and hopes are entertained that the required amount may be subscribed before June 30th, up to which date the offer remains open. At an interview with the St. Pancras Vestry the Committee asked for a contribution of £2,000. The application was referred to the General Purposes Committee with the Vestry's unanimous expression of opinion that it should be acceded to. The London and Middlesex County Councils will, it is believed, largely contribute. Full particulars on the subject will be found in the circular which will be issued with the June number of the Society's magazine.

The Financial Statement for 1895 is herewith presented to the Society. It appears at the end of this Report.

WORK OF THE BRANCHES.

The Council has much pleasure in embodying in its Annual Report the following accounts of the meetings and work of branches. The Council wishes again to thank the honorary secretaries of all the branches for their labours on behalf of the Society, and such branches as are not mentioned here are omitted only because their work has not been specially brought to the notice of the Council, either by means of a report or through the Magazine.

BARMOUTH BRANCH.—This Branch of the Selborne Society did not greatly increase in numbers during last year, but continued to do much practical work.

A Bill was brought forward, at the Society's request—for the Protection of Wild Birds, in the county of Merioneth—at the County Council; but was only carried for a very small area. The Secretary is now in communication with others interested in the question, and it is hoped that the Act will be enforced before long.

The Society last year rented from the District Urban Council a beautiful place near Barmouth, known as the Panorama Hill. The President of the Society restored the Shed which had been used for refreshments, and was in an unsightly condition; and a caretaker was kept there during the summer months whose duty it was to remove daily all picnic fragments left by visitors. The result was most satisfactory.

Lectures were given at intervals; among the lecturers being Miss Frances Power Cobbe, Miss Marianne Farningham, Miss Blanche Atkinson, Rev. G. Mather, Rev. E. Davies, Mr. Owen Edwards, and others.

The Society for the Protection of Birds lent their Bird Slides, which were shown for a second time, while a paper was read by the Secretary, D. A. Hughes, Esq.

BATH BRANCH.—Mrs. Wheatcroft, the Honorary Secretary, sends three rotas which give a list of sixteen excursions and lectures since last May. In some cases, papers on different subjects have been read on the spot. This year Mr. Scott read a paper on "The Antiquities at Bradford;" Mr. Norman, one on "The Site of the Old Castle at Englishcombe;" Mr. Skrine, one on "The Belgic Camp." The number of members and associates is about 300. The Library has been added to and now contains some very good works. The Committee regrets to

record the death of Dr. Hurd, who, although unattached to the Branch, often stayed in Bath and was allowed all the privileges of a member.

BIRMINGHAM AND MIDLAND BRANCH.—In the Annual Report for 1896, presented by the Committee at the meeting held in January, 1897, the Rev. A. R. Vardy presiding, the Committee have to record a slight increase in numbers. Lectures on Birds, illustrated by lime-light pictures, were given by Mr. E. S. Baker at Blackwell, and at Staniforth Street. Thirty-three essays were sent by the Blackwell children, most of them giving good accounts of the Lecture there. In February, prizes were offered in four more schools for the best essays on Bird Life.

The Committee issued a Question Paper, in the summer, to various schools in Birmingham and the neighbourhood.

These are examples :

1. What is the consequence to the farmer of the destruction of small birds ?
2. Why should you not dig up all the primrose roots and fern roots which you can find for your garden ? Describe the right way and the wrong way of picking flowers when you go into the country lanes and fields.
3. What birds leave us during the winter ? Which stay, and how can we help to preserve those that are with us during the cold weather ?
4. If you hid, and watched quite quietly on the banks of a stream, what fishes, birds, and little animals might you see on a summer morning ?
5. Why is it not right to use osprey feathers and small birds as ornaments ? What feathers may be worn without injuring the birds to whom the first belong ?
6. Why is it not right to keep thrushes, black-birds, larks, linnets, and migratory birds in cages ?

Answers have been received from children of all ages between eight and seventeen ; the papers were divided into two classes, one for competitors under eleven, and the other for those over that age. Many replies are very well written, and contain much that is interesting ; some little scholars give more startling information, as : "Moths are not so bright as butterflies ; from living in boxes they like to get the colour of old clothes," and "Some birds, when they fly into Egypt, put a mark on some little islands in the sea, so that they know how to find their companions on the way back to England." One boy remarks : "One of these grand ladies had a cloak lined with humming birds ; she must have been a very careless woman." Many of the Head Masters have been most kind in allowing the children time to write, and in giving special lessons on the subjects beforehand ; it is evident from the answers how much they have been taught of kindness to living things.

Selborne Leaflets have been given to the pupils in many schools, with the help of the Masters.

It is hoped that this year the Committee may be able to arrange for Lectures to be given to the older girls in High Schools, that before it is too late they may be helped to think for themselves how unnecessary it is to buy and wear for fashion's sake things which involve such cruel modes of slaughter as ospreys, small rare birds, sealskin, &c. Notices have been distributed to excursionists asking them not to remove plants and flowers from the districts which they visit in such a way that "The woods are mournful, meadows lose their charm."

CLAPTON (LOWER LEA VALLEY) BRANCH, Eighth Annual Report, Abridged), 1896.—This branch now numbers 62 members, being a slight decrease on the previous year.

During the summer months several field excursions of archæological, botanical and entomological interest were undertaken by members of the branch under the auspices of the Selborne Society's Field Club, and a series of winter lectures were given in the district by Messrs. C. J.

Montague, C. Nicholson, F.E.S., Gerard Smith, M.R.C.S., and Miss Edith J. Temple, on various scientific subjects.

At the invitation of Mr. Fred. J. Hanbury, F.L.S., members and friends visited Steinforth House, Upper Clapton, on November 25, and inspected his valuable collections of lepidoptera and plants.

It is under consideration to provide, as the funds at the disposal of the Committee may permit, lectures or exhibits (by lantern or other attractive means) at local exhibitions, bazaars, or other social gatherings, when such would be acceptable.

After paying the tithe due to the Treasurer of the Selborne Society there remains a balance in hand of £8 4s. 10d.

CROYDON AND NORWOOD.—During 1896 a number of lectures have been delivered on behalf of the Society, in connection with meetings of various local societies.

The Field Club Meetings proved very successful and enjoyable, and by the admission of non-Selbornians to the rambles, it was hoped that good influence might be brought to bear upon them in the way of preventing much of that destruction of wayside hedges and wild flowers which unfortunately characterises too many country rambles.

It is suggested that future work may lie (1) in the direction of the establishment of a Birds' Protection Sunday, or a Nature Sunday, on which day ministers of all denominations be invited to deal with such Selbornian subjects ; (2) the establishment of a Local Museum ; (3) the delivery of lectures to children, with essay-writing to follow.

Efforts have been made throughout the year to obtain the re-opening of a piece of ground which has been closed in the Stroud Green Road, and which formerly was portion of a footpath to Ham Farm, there being every evidence of the ground having been illegally closed.

Attempts were made by the Croydon County Council to obtain, in company with the London County Council, and the Borough of West Ham, identical Orders in Council protecting a large number of birds, and extending the close time so as to include February and August. As is well known, the Order was obtained for the Metropolitan Police area, but this Order has no force in the Croydon County area. An identical application was made by the Croydon County Council, but the Secretary of State refused to grant an Order, on the grounds that by the Act of 1894 there was nothing to show that *County* Boroughs were included in the scope of the Act. The short Act of 1896, however, has removed this disability, but at present no Order has, it is regretted, been obtained.

The attention of the Roads Committee of the County Council was called, early in the year, to the dilapidated condition of the finger-post at the junction of the public lane from Elmer's End and the Wickham Road, Shirley. This was promptly remedied by the County Council, and a new sign-post erected. It need scarcely be added that to the decay of finger-posts may possibly be traced the loss of many a public footpath.

HATFIELD HYDE (JUNIOR) BRANCH (Report, March 10 to May, 1897).—Several years ago some members were obtained for the Selborne Society in this neighbourhood, and the establishment of a branch was proposed but not accomplished.

In the spring of this year, grown people in the parish of Hatfield were approached with a view to membership and the formation of a branch. They made, however, scarcely any response, and as the children of the Hatfield Hyde district of the parish had already shown an interest in Natural History, a branch was formed for their benefit and in the hope that they may become teachers and leaders of their elders in carrying out the objects of the Society.

A meeting was held at the Hatfield Hyde School in February, when it was decided to form a Branch. At another meeting, on March 10, the Branch was duly formed, officers selected and rules drawn up.

There are now thirty-eight subscribing members and four non-subscribing. Seven of the committee (which numbers ten) are children.

When possible, a walk is taken on Saturday afternoons into the surrounding country ; of late this has been almost weekly. Short walks, of about an hour's duration, are often taken at 6 p.m. on other days of the week.

Natural History Notes are taken daily, a lecture delivered weekly by the Secretary, and a list of animals appearing, &c., posted in the school monthly.

It is proposed to establish a Museum, when funds permit, for purposes of education, &c., not for mere collection, and, therefore, with due regard to the preservation of anything that is rare.

The special work of the year is to be excursions by the younger members to the Natural History Museum, South Kensington, so far as funds permit. One such has already been taken and proved most beneficial.

It is found that, so long as the manager pays due attention to the branch, the children take a keen and intelligent interest in the work, and it has been observed that the benefit to them morally and physically and in a hundred different ways is untold. The district is an extremely interesting one and, happily, not much vandalism prevails. Still there is some unnecessary destruction of objects beautiful, and sometimes rare, and doubtless much enlightenment on the ways of our Creator's living works, and much education of the dormant capacity for the appreciation of beauty is needed by the elder inhabitants of our district, parish and neighbourhood.

KENSINGTON BRANCH.—A drawing-room meeting was held in March, at the residence of Sir Julian and Lady Danvers. The Earl of Stamford (one of the vice-presidents) occupied the chair, and letters expressing regret at their inability to attend were read from Sir J. Lubbock (president), Mr. Britten, F.L.S. (editor of the Society's magazine, NATURE NOTES), and Mrs. Brightwen. The Earl of Stamford, in opening the meeting, referred to his being a descendant of Gilbert White's brother, of Selborne, the distinguished naturalist, from whom the Society takes its name, and went on to set forth the objects of the Society. Sir Mountstuart Grant Duff, Mr. Aubyn Trevor-Battye, the Rev. H. E. U. Bull, and Mr. Nicholson were amongst the speakers. Sir M. Grant Duff contended that too much time was spent on unnecessary subjects in schools, whereas the study and love of Natural History was not sufficiently encouraged. Special reference was made to the wearing of ospreys and birds of paradise feathers, and also to the disfigurement of the face of Nature by advertisements and the ruthless slaughter of otters and beavers for their fur. A resolution was moved by the chairman expressing the full sympathy of the meeting with the objects and work of the Selborne Society, and was unanimously carried.

NEW FOREST AND SOUTHAMPTON.—The Honorary Secretary, The Rev. J. E. Kelsall, states that as the members of this Branch are very scattered he has not attempted to call them together, but he endeavours to spread the Society's views by distributing pamphlets and by writing every month in the "New Forest Magazine," which circulates in fourteen parishes.

He has also given lectures on "Birds," in about twenty Hampshire towns and villages, sometimes obtaining for the purpose the beautiful lantern-slides of the Society for the Protection of Birds.

SELBORNE SOCIETY.

STATEMENT OF RECEIPTS, EXPENDITURE AND LIABILITIES IN RESPECT OF THE YEAR ENDED DEC. 31, 1896.

Dr. **Cr.**

Receipts.	£	s.	d.
To Subscriptions for 1896, less those returned to Branches ... ... (£6 2s. 6d.)	116	11	9
,, Copies of "Nature Notes" sold to Branches	96	16	3
,, Contributions by Branches	16	12	6
,, Leaflets, &c., sold	1	2	9
,, Balance	153	11	4
	£384	14	7

Expenditure and Liabilities.	£	s.	d.
By Balance	54	0	6
,, Rent	15	15	0
,, Secretary	25	0	0
,, Postage	8	13	10
,, Stationery	1	19	0
,, Expenses of Annual General Meeting	9	17	0
,, Miscellaneous expenses	7	13	0
,, Purchase of copies of "Nature Notes" and postage thereof	222	12	10
,, Printing	39	3	5
	£384	14	7

NOTE.—In the "Receipts" are included such subscriptions for 1896, payments for copies of "Nature Notes" sold in 1896, and contributions by Branches in respect of their income for 1896, as have been received between December 31, 1896, and April 30, 1897.

There is still about £70 due for copies of "Nature Notes" sold in 1896, and for former arrears. The payment of this sum will reduce the adverse balance to about £83.

J. L. OTTER,
Hon. Treasurer.

SELBORNE SOCIETY.

List of Branches, with Names of Honorary Secretaries.

ABINGER AND SHERE.—Miss Forster, West Hackhurst, Abinger, Dorking.

"ATALANTA."—Miss V. G. Parsons, Twyford Lodge, East Grinstead.

BARMOUTH, N. WALES.—D. Arthur Hughes, Esq., M.R.C.S., Barmouth.

BATH. — Mrs. Wheatcroft, 27, Rivers Street, Bath.

BIRMINGHAM.—Miss D.C. Sturge, Ker Yoes, Harborne, Staffordshire.

BRIGHTON.—Miss E. Bourne, 12, Denmark Terrace, Brighton.

BROMLEY (Junior Branch).—C. E. Hartley, Esq., Quernmore, Bromley, Kent.

CAMBRIDGE.—F. A. Hort, Esq., 6, St. Peter's Terrace, Cambridge.

CLAPTON (Lower Lea Valley).—R. Marshman Wattson, Esq., 32, St. Andrew's Road, Stoke Newington, N.

CROYDON AND NORWOOD.—E. A. Martin, Esq., F.G.S., 69, Bensham Manor Road, Thornton Heath.

DOVER (Junior Branch).—Bernard F. Hall, Esq., Dover College.

EALING (Brent Valley).—H. W. Ravenshaw, Esq., 32, Albany Road, Ealing Dene, W.

FARNHAM. — Miss Marindin, Broomfields, Frensham, Farnham.

HALIFAX.—Mrs. Whitley, Brantwood, Halifax.

HASLEMERE. — Miss Buckton, Weycombe, Haslemere.

HATFIELD (Junior Branch).—Rev. H. G. O. Kendall, Orchard Cottage, Hatfield, Herts.

HAVANT. — Capt. J. Chippindall Healey, Old Mill House, Bedhampton, near Havant.

KENSINGTON.—Miss M. Danvers, 103, Lexham Gardens, Kensington.

KENT (Weald of) — Miss K. Knocker, Bella Vista, Southboro', Kent.

LOWER THAMES VALLEY (Richmond).—J. Allen, Esq., 8, Clarence Road, Kew, and W. Jones, Esq., Somerleigh, St. Margarets, Twickenham.

MALVERN.—W. H. Jones, Esq., Norfolk Villa, Malvern.

"MARKWICK" (Horsham). — Mrs. Blackburn, 13, Barrow Hill, Henfield, Sussex.

NORTH SOMERSET.—Miss A. Fry, Failand House, Failand, near Bristol.

NORTHERN HEIGHTS. — Miss A. Martelli, 6, Prince Arthur Road, Hampstead.

NOTTINGHAM. — Mrs. Foster, The Park, Nottingham

PORTSMOUTH.—Dr. J. E. H. Kelso, Chesterfield, 67, Elm Grove, Southsea, Hants.

RAPE OF LEWES. — Mrs. A. Payne, Hatchlands, Cuckfield, Hayward's Heath.

"RICHARD JEFFERIES" (Worthing).—Miss H. Urlin, The Grange, Rustington, near Worthing.

ROTHER VALLEY (Midhurst).—Miss Richards, Easebourne, Midhurst, Sussex.

ROTHER VALLEY (Petersfield).—Mrs. Ticehurst, Petersfield, Hants.

SELBORNE AND LIPHOOK.—Miss Fowler, Liphook, Hants.

SOUTHGATE.—Selborne Boome, Esq., Headingley Palmerston Road, Bowes Park, N.

SOUTHAMPTON AND NEW FOREST.—Rev. J. E. Kelsall, East Boldre Vicarage, Southampton.

SUTTON.—R. Hill Blades, Esq., The Firs, Sutton, Surrey.

WEYBRIDGE.—Miss H. C. Gardiner, Heathfield, Weybridge.

WIMBLEDON AND PUTNEY —Miss Ada Smith, Walcot Lodge, Putney.

SELBORNE SOCIETY NOTICES.

Donations towards Reduction of the Deficit.—The following letter has been received from the Hon. Sec. of the Clapton (Lower Lea Valley) Branch :—

"DEAR SIR,—Upon hearing of the serious deficit in the Society's balance sheet, my Committee have decided to hand the Council a portion of their balance, which it had been intended to expend in local work during the coming Winter Session. I therefore have the pleasure of enclosing cheque for £5 herewith.

"I am, yours faithfully,

"R. MARSHMAN WATTSON,

"*Hon. Sec. and Treasurer.*"

In addition to this donations have been received—from Miss M. B. Danvers, 10s., and from Mr. William White, F.S.A., 10s. The Council begs to acknowledge with grateful thanks the receipt of these donations.

Field Club Saturday Rambles :—

July 3.—Warlingham to Chaldon Church, where view the Frescoes. Tea at Chaldon. After tea walk to Caterham. Take return ticket to Warlingham (S.E.R.) Cannon Street, 2.17 ; London Bridge, 2.20 ; East Croydon, 2.47.

July 10.—Leave Hanwell Station (G.W.R.), on arrival of train leaving Paddington at 2.50 ; Ealing Broadway, 3 ; Broad Street, 2.20 ; Willesden, 2.52. Walk to Greenford, and home by Perivale. Tea at the Inn at the top of the hill, Greenford. Guide, Mr. Ravenshaw.

July 17.—Take *day* return tickets to Stoke D'Abernon (1s. 9d.). Get out at Oxshott Station and walk to Stoke D'Abernon, where tea. Waterloo 2.17.

July 24.—In conjunction with Lambeth Field Club. Meet at Epsom Station (L.S.W.R.), at 3.15. Train leaves Waterloo, 2.40 ; Clapham Junction, 2.51. Cheap return tickets, 1s. 6d. Route along north side of Epsom Common, then into and across Ashtead Woods to Ashtead Station, near which tea will be had. Guide, Mr. H. Wilson.

July 31.—Saturday before Bank Holiday. No Ramble.

BRANCH CONTRIBUTIONS.

	£	s.	d.
Bath (Magazines)	1	15	0
,, (Branch contribution)	3	0	0

Council and Committee Meetings.—The next meetings of the Council will be held on Tuesdays, July 6 and August 3, at 5.30 ; of the Magazine and Leaflet Committee, on July 20 and August 17, at 5.30 ; and of the Finance Committee on July 20 and August 17, at 6.15.

NEWS FROM THE BRANCHES.

Abinger and Shere.—A party was conducted by Professor Boulger, from Gomshall over the Downs to Coombe Bottom, on Saturday, May 29. In spite of unfavourable weather there was a good muster for the walk. About fifty adults and children were entertained by Mrs. Baker at tea after the walk, and listened with much interest to Professor Boulger's admirable address on Gilbert White and his methods of observing nature, without injuring either plant or animal life. A vote of thanks was proposed by the Rev. E. Morris to Professor Boulger for his kindness in coming down to conduct the walk, and to Mrs. Baker for her friendly hospitality. The vote was unanimously carried.

Bath.—The last of the spring rambles took place on Saturday, May 29, when a visit was paid by a party of about fifty, to the Castle in Newton Park, by kind permission of Earl Temple. The ramble was conducted by Mr. F. L. Bartelt, who gave an interesting description of the archæology of the castle. Tea was kindly provided by Mrs. Bartelt at Corstan Lodge. Among those present were Lady Wolseley, Miss Shaw-Hellier, the Rev. C. B. Caslon, Mrs. Forsyth-Browne, Miss Paynton, General Jerome, and Mrs. Wheatcroft, the Hon. Sec.

EDWARD A. MARTIN, F.G.S.,

Hon. Sec. Magazine and Leaflet Committee.

Nature Notes:
The Selborne Society's Magazine.

No. 92. AUGUST, 1897. Vol. VIII.

THE CHILDREN'S COUNTRY HOLIDAYS FUND.

WE have more than once appealed to Selbornians to take part in the excellent work by means of which some slight knowledge of those charms of Nature which they themselves so much appreciate is brought to those who are less fortunate in their opportunities. Ten shillings is sufficient to ensure a week's holiday in the country for a child. There must be many of our readers who could give that sum without difficulty, and who spend much more than ten times that amount on their own annual holiday. Will they not increase their own happiness by making others happy? Last year 30,000 London children were sent away through the help of this fund; this year subscribers are fewer and subscriptions smaller.

The following extracts from the interesting Report on Country Holiday work, which Miss Margaret Sewell has edited for the fund, will show how much need there is among town children for education of the kind which a country holiday gives:

To most of the children the country in itself is sufficient to make a holiday; plenty to eat, fields to play in, and a shallow stream where you can wade and try to catch fish with your fingers if you have no rod, are delights enough to fill up a fortnight quite happily. No definite teaching of any kind has been organised. There is no lack of instruction for the children furnished daily and hourly by the commonest objects around them, and they are so keen to observe and to know, that they are not slow to ask for an explanation that may open up whole new worlds of knowledge and reflection for them. For instance, that water was to be found underground and could be brought up for use by such a strange-looking thing as a pump in a garden, was a matter of the greatest wonder and admiration to two intelligent little boys who only knew before of its existence in taps and the river Thames; and the same boys came home from a walk full of wonder at having discovered in a farmyard "houses built of straw with no door or windows," and "birds carrying something white underneath them," the clean white breasts of the martins bearing in their minds no likeness to the smoky

plumage of the London sparrow. Such questions as "Who put all the birds in your garden?" or "What makes this field so high?" asked when the corn had grown almost to the level of a bordering hedge, show the elementary state of their minds as to any really intelligent or personal knowledge of natural things, however many facts school books may have taught them. They show also that at present it is enough for them to learn the names of the simplest flowers and trees, most of which they do not know. On one occasion a child was shown a potato plant, and told that she often had its roots for dinner, and was asked to guess what it was. "Is it eggs?" was her eager answer. Bees are a most interesting object of study; one of our hives has glass windows, and part of the Sunday afternoon treat (to be spoken of further on), is for the children to be allowed to go in pairs to look into the hive and see the honey in the cells, or to watch the bees coming in with honey or wax, and be told how they live and work. The children stroke the grass to feel how soft it is, and stand under the trees to see how tall they are! "Does that big tree all belong to you?" was asked once almost in a tone of awe, as if it was high enough to be shared in by many families. And they gather huge bunches of flowers to take back to little brothers and sisters who are as yet too young for the holiday, and who are taught to look on the country as a sort of Paradise where good children go.

We note that the Council of the Fund this year issues "suggestions" for interesting the children in the study of Nature, and that it is proposed they should gather leaves of certain trees, press them, gum them into an exercise book, write the name of the place and the date when gathered, and make a pencil drawing of the leaf; while "it is hoped that the teachers and visitors will talk to children who are going into the country, and interest them in the idea of collecting, and that the country correspondents will give their help and advice to children during their holiday." The intention of all this is excellent, but we doubt whether much will come of it, nor, to tell the truth, are we greatly in sympathy with the proposal.

Another suggestion—"children may be asked to give a list of plants they have seen, but not collected, mentioning those in bloom, and giving a description of one"—shows a curious ignorance of the fact that even country children have a very limited vocabulary, and that the names of many, even among the commonest, plants, are not included in it.

But the common sense of the children may be trusted to resent any undue attempt to turn what should be a holiday into a continuation of school; and we trust that the visitors will not endeavour to press this well-intentioned innovation. What the children want is a holiday; what *we* want is that our readers should help them to get it. All who will do so are invited to send 10s. to the Secretary of the Fund, Mr. McCurdy, 10, Buckingham Street, Strand, W.C.

THE EDITOR.

QUIRREL.

THREE springs ago I found a little fledgling missel-thrush which had fallen from its nest, squatting unabashed on a green bank; it opened its mouth and called aloud for food. Seeing no protection or help for it near, I took it into the house and supplied its needs, which were large. Then, fearing I might prove an inefficient foster-mother, I swung it up in a basket half-way up a tree near its supposed home, and stood a little distance—concealed I *hoped* by foliage—to watch. But though the parent birds screamed excitedly overhead they feared apparently to approach, and I had at length myself to act the part of parent. Never had parent a more exacting offspring. At 3 or 3.30 I was aroused to attend to it, and it required unremitting attention all through the day. Happily it was a rapidly developing bird and soon assumed its own responsibilities—not, however, before it had learned prettily to recognize my approach by fluttering wings and a soft "quirrel" of welcome.

One day I found its house empty—it had cleverly discovered a small loophole of escape. Though it could fly and feed itself, it was, I knew, impossible for it to forage for itself, and its chance of life was small indeed. I felt quite hopeless of recovering it, not knowing how many hours it might have been free, for I had left it an unwonted time that day. I thought it just worth while to venture a call, but I felt excessively foolish when I heard my own voice, and ardently hoped no one but the bird would hear as I made a feeble imitation of its note of welcome, the call I had half unconsciously been accustomed to use when feeding it as a baby. Almost immediately came an answering "quirr-r-rel" from somewhere above, and looking up I descried my young friend on a spreading branch some twenty or thirty feet from the ground, looking very well placed indeed. I called louder and more encouragingly, and a little buff ball of fluff fluttered down at my feet, allowing itself to be recaptured with more apparent content than regret. Twice later during my absence from home it in some way got free, but on both occasions allowed itself to be readily caught in one of the outsheds. It seemed to linger round the shelter of dwellings.

The following year it so happened that another fledgling missel fell in the same manner into our hands, was reared and in due time placed in the large outdoor cage with the other bird. When the breeding season came there was great excitement in the bird-house, very urgent were the appeals for help, there was no mistaking their wish to make their needs known. A large bough was put up and an old disused nest fixed upon it, and the rejoicing was great, but after the first burst of delight they discovered matters were still not quite as they should be. Quirrel soon made me acquainted with the fact by her restless

dissatisfied movements and repeated whirls towards and around me. Finally she lighted on a shred of straw which she picked up in her beak and literally seemed to show me. A handful of hay soon made them both happy, and business began, after various interruptions, in earnest. The eggs were laid and sat upon till within a few days of hatching, and then, alas, the bough partially slipped from its holding. How these birds begged to have it put right for them again; but no one was present at the precise time it fell, and though it was replaced as soon as the mishap was discovered, it was too late. The birds returned to the nest the instant the bough was firm with many protestations of joy, but in a few days deserted the nest, and upon examination the eggs were found to contain two perfect little birds dead within a day or two of their hatching. After this my poor little birds lost heart and could not agree upon rebuilding. For some time they tossed and mooted the question, sometimes deciding for, sometimes against. Then came quarrels; one was intent upon a second attempt, the other absolutely and steadily refused, would not even make pretence by carrying hay about in its beak. Their relations became strained; Quirrel tried to explain something to me, but I was stupid and could not understand. Then one day there was a tragedy unprecedented in my experience of bird life. One morning news was brought me that missel lay dead in a corner literally scalped. Poor little bird! it was a sad ending, and I reproached myself for not having taken more pains to see how matters stood.

Well, I was very angry with Quirrel, who was now gaiety and happiness itself, in sole possession of her home. I felt I should never lose her again (but in a short time I did). I opened the window so that she might take her freedom if she would, but she would not. Then I closed it and kept her safe through the winter. I thought when the spring season came round she would feel her loneliness, so I again gave her her chance of freedom, that she might join the wild missel thrushes I heard so often calling to her in the trees near—and she answered them—they might come to her if they liked, but she would not go to them.

Just at this time we had a wounded and half-starved owl given to us, for whom the bird house was wanted, so Quirrel was moved to the pigeon house—a large wire-netted enclosure. Here she was happier than happy, and though she might still have taken her freedom any day, and the missels called to her hourly from the spring-foliaged trees, she never looked that way.

One morning on going to the pigeon house I was startled to see one of the largest white common pigeons smeared with blood, and with its beak still bleeding. "Brutes of rats!" I exclaimed, not knowing whom else to blame; but at that moment, hearing rather a rumpus going on, I looked round and saw the recreant Quirrel with her claws fastened firmly on to the breast of my pet brown pigeon (who was guarding the entrance to her young), pecking away mightily, and Bijou powerless in the claws of her

small enemy. What was to be done with such a bird? Of course I was very angry again, and not knowing how else to preserve peace, I turned Quirrel out, neck and crop, hoping she would mate, and with her mate's help be able, now the weather was warm, to fend for herself. Some hours later I went out, and while feeding the pigeons heard the familiar "quirr-r-el," and my incorrigible flew down upon the wire netting with her head on one side, and said distinctly, "I wish I were in there too—let me in!" and I did, arguing to myself that perhaps she had had provocation, and had now recovered her temper. Had she? She was back at the pigeons in an instant, scolding, pecking, clinging. Once more I turned her free, but it was just the same story over again. I delayed my return longer this time, but the instant I reached the pigeon door, with a loud "quirr-r-el" she flew down again, almost at my feet, and almost embracing in her flight the cat whose presence she had grown so accustomed to on the top of her wire-netted home. I saw then how totally unfit she was to brave the world, even had she wished to, and she did not wish to—and I did not wish her to; her appeal to be taken back was irresistible. I opened the door again and in she flew; I rigged up some wire netting across the end of the enclosure, to preserve the pigeons from molestation—it was not quite wide enough to reach across, so I wove the netting together with string, tying the string at the bottom. Next morning I was surprised to find Quirrel the wrong side of the division. I saw the string loose at the bottom and I rectified the mistake. Next morning the same thing had happened. I could not quite understand my repeated stupidity, and I made sure my knot was tight the third night; but next morning the same thing had occurred again. The following night I got the coachman to make it secure, telling him what had happened; he tied a hard and I think double knot, but the next morning it was all undone again, and a wider opening made, as if in triumph. Quirrel had learned to love a certain snug little roosting place behind the partition, and it took wire string to keep her from it. I am told it was cruel and unsympathizing not to let her cleverness have its just reward—she outwitted man four times, and she deserved a reward.

Quirrel refused to take her freedom with the wild birds, but I shall scarcely be believed when I say further that a little wild song thrush (who never sings, by the way) has voluntarily joined Quirrel in her captivity. It might go by the same road it came any day, but it seems to have no inclination to do so, and had been some two or three weeks in its chosen captivity when I left home last month, and I have little doubt will be there still when I return. It is very strange to me, this, and the more so that the two birds exhibit no particular affection for one another—scarcely indeed notice one another apparently. I have placed a nest for Quirrel, but she chooses her own nesting place, and lays her own eggs in absolute independence. Her self-chosen nest is a pigeon-rest under the open eye of heaven, on which she

has gathered several little fragments of loose shreddy rubbish she picked up, and over the side of which she carefully deposits her egg. I saw its blue shell shattered on the bricks beneath, the day I left.

L. C. JAMES.

TROUT FISHING.

NOT very long ago a friend of mine, who all his life has been an observer of nature and is my senior in years, to whom I had mentioned that I devoted a portion of my time each week to the reading of books on Natural History, remarked, in what might perhaps be considered a not very complimentary manner, "Oh yes! I have always looked on you as rather a book naturalist than a practical one," to which I replied, "Well, as I have for nearly a quarter of a century been a trout fisherman I must perforce have some practical knowledge of nature."

I mention this little episode because some may ask what we have to do with trout fishing in the pages of NATURE NOTES. The answer is that although a naturalist is not necessarily a fisherman, a fisherman must be somewhat of a naturalist, and my object just now is not to try and teach people how to fish, but to endeavour to show in some measure how the practice of the angler's art leads him to the study of nature.

In the first place he must know something of meteorology; and more particularly if he be in business and must take his holidays when he can get them, will he be anxious as to what the weather will be when he goes a-fishing. His success so much depends upon the weather: if anyone doubts this let him take a piece of silkworm gut and hold it above him so that he can see it against the sky, the same way that a fish will look at it; on a fine day it will be much more visible than on a cloudy one. The evening before the appointed day, as the sun sinks on the horizon, his eyes will glance towards the west, and if he finds the red lit glow with keen air, he will shrug his shoulders and say, "Alas! poor sport to-morrow;" or, on the contrary, if the indications are in favour of dull weather with west or southerly winds, he will be filled with hope. Again, the last thing before going to bed his eyes will be cast heavenwards trying to look into the morrow.

When morning comes he will be early astir, the window thrown open and the signs of the weather again consulted. It may be that during the day sport will be interfered with by storms of rain, hail or snow, and as the fisherman gathers his waterproof around him and crouches beneath some boulder or shrub by the river side, with perhaps the frequent crash of

thunder and play of the lightning flash too near to be pleasant, awed by the majesty of nature, he will have time to speculate on the origin of storms, the length of their duration, whence they come, whither they will go. Or, perhaps, far away amongst the hills he becomes enveloped in a fog, and having quitted the river will travel in a circle, wandering hither and thither in his hope to find a path homewards, unless he has thoughtfully provided himself with a compass. Or if he has been night fishing, capturing the large trout with the dead minnow, as the least dawn of light appears he has to forsake his work, and being in a low-lying situation often finds he is surrounded with dense mist, which, when he arrives home some way further up stream, and looking back, appears like masses of cotton wool stuffed into the valley; then is he led to think of the origin of mists and clouds, and their use in the economy of nature.

Our fisherman next must be somewhat of an entomologist. The chief food of trout is flies, and these, or representations of them, must be his principal bait. "What fly shall I use?" is the question that presents itself to him as he goes to his fishing haunts. This is soon answered by the experienced hand; he has long ago reduced his list of artificial flies to a small number —I never use more than six myself—and the weather, state of the water, and time of year will determine which are the suitable ones. But beyond these few, which but indifferently represent anything in nature, what numbers of various flies frequent the rivers. Let anyone carefully look at the surface of any stream on a fine summer's day, and he will soon be convinced of this. Some are so small that it requires sharp eyes to detect them; though unseen to most men they do not escape the eye of the trout or of the fisherman. The angler, too, must gain some knowledge about worms and grubs, and distinguish those suitable for his use.

Next he will be in some degree an anatomist. When he has laboured long on some unfavourable day and at last taken a fish, he will sometimes cut him open to examine the contents of the stomach and thus learn what fly to use. Beginners frequently do this, but the old hand knows readily enough the right fly, as I have said.

As it may be asked what flies I do use, I will give my list, which is for rivers in South Devon, where I have principally fished, but I have used these successfully in North Devon, Somersetshire, in Switzerland, and in Germany:—

1, Blue Upright; 2, Infallible; 3, March Brown; 4, Red Palmer; 5, Silver Twist; 6, Black Palmer.

No. 1 is *par excellence the* fly for South Devon, and may be used all the season, but is essential when the water is bright and low; it is really a grey fly. No. 2 is a change from No. 1, but not so good a fly. No. 3 is a capital fly in the early part of the season. No. 4 invaluable in the summer months; this fly should have a black head. No. 5 for use when the water is

coloured, it is a blue (grey) fly. No. 6 when the black clumsy flies with long-hanging, unjointed-looking legs are on the water, about June, only then.

The blue upright has its counterpart in nature, there being a fly tolerably like. The march brown is also a fair representation of life. The red palmer or "cock-a-bondhu" is like, or supposed to be like, a well-known beetle which sometimes abounds on the bracken. The black palmer's prototype I have already spoken of; it should have silver tinsel round the body. I suppose the infallible and silver twist are intended to represent the same fly as the blue upright.

All the above are hackle flies. The list might be reduced to five by striking out the infallible. I generally use two flies a little more than a yard apart. I never use the finest gut, it is difficult to cast and loses many fish. The famous May fly, of which such capital representations are made by the tackle manufacturers, is little seen in South Devon.

But I am digressing. I said my object was not to teach how to catch trout; those who want to learn had better stand a proper distance from an old fisherman and watch him at his work, and at leisure read Stewart's *Practical Angler*.

Again, a fisherman will be a geologist. As he treads the river's bank he will notice that the bed of the stream is composed of different rocks; at one place the water will run over slate, and here the trout will have light coloured scales; far away on the moor fish will be found in pools and holes in peat bogs, here they will be almost pitch black, but where there is granite bottom there will the coat of the trout shine in its full lustre of many colours.

The habits of trout will specially be studied; they rise and are caught often in stickles where the water is rough and swift, and ignorant people would think that the fish lie there. Not so; the fisherman knows to a nicety where fish are, if they were in the stickle they would be tired to death with perpetually swimming against the current. The food of the fish comes down the stickle all night through, but the fish lies a little to one side behind the shelter of some stone or other protection where the water is still and he has only slightly to move his fins to keep him in his place. In consequence of this the eyes of the fish are so set that he looks upwards and sideways somewhat, indeed, I do not myself believe that a trout can see straight in front of him.

A noticeable thing about trout is the way the largest fish will possess himself of the best place in each pool for getting food; the angler thus knows always where to find the best fish. When one gets the best fish out of the pool, he is soon replaced by the next fish in size in the neighbourhood.

Fish have the remarkable power of ejecting readily and with great force objects that get into their mouths that they do not relish and do not wish to swallow. Fishing for perch with a worm or grub this is soon seen, for when the fish is taken, one finds

the bait blown several inches from the hook along the gut; in the same way pike drive the dead roach a foot or more up the gimp. This habit of fish explains how it is that a hackle fly is a more deadly bait than a winged one. It is easy to understand that as the fish blows out the false food the water that goes with it will catch behind the hackle and drawing the hook straight out plant the point firmly in the jaw of the fish; the water will have no such good hold with a fly made with wings. Again, it is a well-known maxim with anglers not to use bulky flies; if the body of the artificial fly be large, the water that is being ejected with it will readily catch it, and the fly being driven out sideways, the point of the hook will miss and the fish escape being hooked. Some fishermen think that they hook their fish with a turn of the wrist, or some fanciful manœuvre on their part, but it is the opinion of the writer that in at least nine cases out of ten the fish hooks himself when trying to eject the bait. I have not seen this explanation of the superiority of hackle flies given before, and I commend it to the consideration of my fellow-anglers.

Where there is water there is life, and besides the inhabitants of the waters, what numbers of creatures come to the riverside, some to feed, some to drink. The fisherman encounters all these. If he be at Killarney or in Scotland, he will fall in with the stately red deer, and how often have we met foxes in our fishing rambles; others are nocturnal in their habits, but once when fishing a couple of miles above Ivy Bridge, on the Erme, I saw one coming down stream; he paused for a moment, sitting up and looking straight in my face with those fine intelligent eyes of his, and then, taking a header, went away close past me. What number of water-rats run in and out of their holes. There every kind of bird is seen by the fisherman, but chiefly kingfishers, water-ouzels (these constantly flit before him), ring-ouzels, herons, wild fowl, and occasionally he may disturb the snipe upon her nest, curlew scream overhead, or in the breeding season call softly to one another in the bogs, whymbril, golden plover, peewit, wheatear partridges, pheasants — these are some of his companions in solitude; at times he sees buzzards, and on one occasion in the Rhone valley in Switzerland, I surprised a pair of fine eagles that were feasting upon their prey not far from where I was fishing. I might go on and tell of almost every bird in the catalogue.

In short, a fisherman must be a naturalist, and he sees Nature in her varying moods. On a perfectly fine day, when there is no cloud in the sky the sun shines in his full strength, and the water is low, so that there is little sport, he has compensation in the loveliness of his surroundings, and then it is that, peering into the stream, he sees in the very ripple of the water those wondrous touches of lustrous blue doubly distilled and reflected from the heavens, reminding the observer of a beauteous sapphire. I have no words to describe such colour,

but it has been recognized by the skilful artist who shows it us on his canvas, and our remembrance of it is awakened when of a winter's evening in the fire on the hearth the blue flames play amidst the cinders.

Botany cannot be omitted from the ken of the fishermen; in early days he will often catch his flies in trees, and soon will he begin to distinguish one from another and their capacity for retaining the flies he has unfortunately lodged in their branches. He will notice the aggravating flower that grows on the side of rushes so prone to catch his fly. He will observe the component parts of peat, and learn from bog-oak of the former existence of forests, and notice the very formation of bogs.

Lastly, he will be led to the study of man. There is a certain fraternity amongst all anglers, and if strangers when they meet they soon fall into agreeable conversation, they have a common topic to discuss, and a very dear and engrossing one. Every fisherman is an enthusiast; with him are no half measures. To catch trout requires all man's wits; if ever there was a lazy and sleepy trout he has long been improved out of existence, at any rate on waters open to the public—the survival of the fittest has done away with him. So it comes that a man that *takes* trout cannot be a dullard; moreover, he must be natty with his fingers, the manipulation of his line tackle requires this; he must have patience and perseverance; and all fishermen are brothers and genial men, they enjoy a happiness unknown to others.

The fisherman's intercourse with nature is joyful, and as I hope I have shown instructive, and when his day's work is over his joys are not ended. Speaking gastronomically, the good things of this world may be counted on the fingers; dainty dishes are few, and a dish of fresh trout nicely cooked is one of them.

GILES A. DAUBENY.

BIRDS IN A GARDEN.

ONE of the chief delights of a country garden consists in the wild birds that make it their home. Without the birds a garden might indeed be beautiful, but could not be gay. Over it would brood a perpetual melancholy. Spring, unaccompanied by bursts of triumphal music, would bring no thrill of hope to the heart; summer, for all its wealth of roses and lilies, would be but a St. Martin's summer—a fair silent picture, not a vivid, soul-inspiring drama—and would from the first contain a prophecy of winter's decay and death.

Nothing can surpass the charm of the bird's song in early spring. After a long period, it may be, of frost and bitter east wind, there is a sudden change, and the air grows soft and mild. You wake early one morning and hurry out into the garden.

The sun has just risen and gleams like a fiery ball above the horizon, darting level rays through the laurels on to the lawn, and making the dew-drops sparkle like thousands of jewels. Suddenly, from a tall fir-tree hard by, a blackbird pipes his loud, joyous call, another answers him, the thrush, the sparrow, and the chaffinch chime in, and you are listening to a charming madrigal—such as was never heard from a guinea concert stall—performed gratis for your benefit.

The cuckoo's cry is, of course, both from its inherent melody and from the associations that cluster round it, the most welcome note of spring. There is none so old, so broken down with sickness, or worn with sorrow, but feels at its first hearing some faint thrill of hope and pleasure. Who shall tell how many hearts this joyous pæan has cheered, how many souls it has lifted above the sordid cares of earth! Even the labourer, doomed to monotonous toil in the sodden fields, listens eagerly for the cuckoo's note; it comes to him as a dim revelation of some happy world where men live free and careless, unburdened by the thought of the day's pressing needs, or the grim uncertainty of the future.

As the cuckoo heralds the approach of spring, so is the nightingale the earnest of her presence.

The nightingale usually makes its appearance about April 15, earlier or later according to the season. We shall never forget the first time we heard it in our own garden. We had strolled out one mild sunny April morning, and as we passed down a shady walk there rang out from the neighbouring shrubbery a clear jubilant burst of song. It was the nightingale, not sad Philomel bewailing her lost Itys, but a joyous spirit singing victoriously of warmth and sunshine, and the voluptuous pomp of summer. There is no mistaking that note; it is louder and clearer than that of any other British bird. At the same time it cannot boast of much variety, and when heard frequently may become a trifle monotonous. It is, moreover, apt to be somewhat disturbing at night to a bad sleeper. One then feels inclined to ask, with Fitzgerald, why the nightingale does not go to bed with the other birds! We once knew a poet, who as long as he lived in town was a great admirer of the nightingale's song, and vied with Keats in writing odes to its praise. When, however, he took a house in the country, and several nightingales perched on the trees near his window and diligently serenaded him, his opinions underwent a change, and one night, when his nerves were more than usually sensitive, this poet threw open his casement and (*nefas dictu!*) cried "shoo" to the nightingales! This, of course, only proves the weakness and inconsistency of human nature; it must, however, be said that the beauty of the nightingale's song has been somewhat exaggerated, partly, perhaps, owing to the fact that being heard at night, as a solo, and also to its sudden changes of note, it gains closer attention than the general chorus of the other birds. We may remark,

by the way, that the nightingale is not the only bird that "sings darkling." We have several times heard the cuckoo at midnight, though whether this occurred normally, or only in the case of some obfuscated cuckoo who had mistaken the moonlight for the rays of early dawn, is more than we can say.

Besides the cuckoo and nightingale the hedge-sparrow and red-backed shrike have a special association with spring. The former (pedantically styled the "hedge accentor") has only one note—in sound like the scissors of a hair-cutter in 3's and 2's—a persistent "tweet—tweet—tweet" that gets more and more vehement as it goes on, and reminds one of an angry tirade by some scolding housewife. The latter (the "butcher-bird") utters a loud aggressive call, suggestive of his bloodthirsty instincts. He is the very tamerlane of the feathered world.

June is by far the best month for the birds' song, as it is in other respects the most lovely month of summer. How people can deliberately spend this golden time in a smoky town is one of the mysteries of civilization. Every June day spent in a garden is a delight beyond words, and adds a precious pearl to the store-house of the memory. By the end of this month the birds' music is practically over. During July a few snatches of melody are occasionally heard, but in August, when the silly townspeople at last flock down to the country, even these are hushed. The glory of the roses is fled, the days are shortening, and the Londoner, if he have any soul, must think regretfully that another June—the queen of months—has come and gone, and that *he* has not shared in its pleasures.

Birds, we must confess, commit sad havoc amongst fruit. This is their one defect. We will not attempt to excuse it, merely remarking that human beings also have their bad qualities. Of course, there is no doubt that the birds, if only they could understand the true state of affairs, would soon mend their ways. If they could once be brought to see that gooseberries and currants are not grown for their exclusive benefit, but also in some measure for those who cultivate them, they would leave us some of the fruit—say a third part—but until education has been brought within their reach, they will continue to help themselves, when they can, to the whole. To protect our strawberries and other small fruit from depredations we last year had a large cage constructed. The sides were of one inch mesh wire netting, six feet high, and the top, which was movable, was of fine string netting. We found it answer admirably as regards the strawberries and gooseberries. The big burglars, such as thrushes and blackbirds, could not get in, and we had the satisfaction of picking our strawberries at leisure, while the baffled thieves—so we imagined—ground their beaks with rage and disappointment. To our disgust, however, the cage did not suffice to keep out the throng of petty criminals. Tiny white-throats, tits, and finches, squeezed themselves through the yielding string meshes (not through the wire

netting), and steadily diminished our currants and raspberries. They got *in* without much difficulty, but getting *out* was another matter. Instead of seeking an exit by the way they entered, they flew backwards and forwards the length of the cage, vainly trying to force a passage through the stiff wire meshes, and refusing to avail themselves of the door that we opened for them at the side. Birds can apparently only see straight in front of them, and in the days when they were harnessed to fairy carriages did not require blinkers.

We do not believe that birds injure *young buds*. They have the credit of doing great damage of this sort in early spring, but, with all due deference, we consider this idea a fallacy. The bullfinch has been singled out for special reprobation, but we feel sure that he pecks only at the *diseased* buds, for the sake of the grub that lies concealed within them. In any case one bullfinch, with his sweet pipe and lovely plumage, is worth a good many gooseberries. We shall never cease to regret that once, yielding to the persuasions of a gardener, who said that they were destroying our chance of a crop of greengages, we allowed him to shoot one or two bullfinches. We felt quite conscience-stricken when we saw the beautiful creatures lying dead on the garden path, and inwardly resolved that we would never again consent to so murderous a deed. Moreover, to complete our remorse, our crop of greengages, far from being larger, was particularly bad the following year!

In autumn a few of the birds resume their song—notably the robins,

> "Singing so thankful to the dreary blast,
> Though gone and spent its joyous prime
> And on the world's autumnal time
> 'Mid withered hues and sere its lot be cast."

Not till November is the garden quite silent. Then the birds fly to their coverts; all nature sleeps, waiting till the warm spring zephyr shall blow

> "Her clarion o'er the dreaming earth and fill
> (Driving sweet buds, like flocks to feed in air)
> With living hues and odours, plain and hill."

A. L. Stevenson.

[Mr. Stevenson's name should have been appended to the article on "A Year's Nests," in our last issue.—Ed. *N.N.*]

ROSES AND VERSES.

THE return of the rose reminds us—although, indeed, we had not forgotten it—that a daintily-bound volume, the contents of which are not less charming than its exterior, has awaited notice for nearly a year. Not want of will, but want of space, has prevented us from calling attention to the new edition of *Ros Rosarum** —"dew of the ever-living rose, gathered from the poet's garden of many lands,"—as the author prettily describes it. The Hon. Mrs. Boyle—more familiarly known by her initials "E. V. B."—has had no difficulty in filling a volume with references to the rose; her task has been one of selection, and the very abundance of material must have made choice difficult. Many ages and many tongues have been laid under contribution, so that it is not wonderful if we miss many familiar quotations, such, for example, as "it was roses, roses, all the way," which might not unfitly appear on the title page of a new edition.

In the "Epistle to the Reader" the author gives a delightful chat about her subject. We find ourselves in hearty agreement with her when she refers to the roses of the rose-grower as "most often scentless, or else, when fading, we wish they might be. The poet," she truly adds, "had in his thought something widely different from these when he praised 'the patient beauty of the scentless rose.'" Certainly our flower-shows give us too many of these gross over-fed blossoms, not only in roses, but in other things; the worship of wealth seems to have permeated even our floral exhibitions, and the most opulent flowers are most held in honour. But such are not the roses dear to "E.V.B."—dear, also, to the lover of beauty and fragrance, of form and delicate hue, who will find in this charming little book a fitting companion to the "pot pourri" of which the author speaks so lovingly.

Roses, too, play their part in *The Saltonstall Gazette*,† another volume which has lain too long unnoticed. The readers of *The Day-Book of Bethia Hardacre*, which was noticed in NATURE NOTES for 1896, p. 74, will know what to expect from this volume, which we owe to the same author, and their expectations will not be disappointed. At the same time we confess that, whether because the novelty of form has a little worn off, or because Mr. Peter Saltonstall is a less discriminating chooser of extracts than Bethia Hardacre showed herself to be, we find the *Gazette*, save in one particular, less attractive than the *Day-Book*. The jokes which are introduced into the advertisements are too small to be worth printing, and the contrasts between the characters as brought out in their various letters are too violent, although at times these self-portrayals are amusing enough. The extracts are, many of them, pleasant reading, though we should have been glad if the author, in an appendix or elsewhere, had enabled us to trace them to their source; and Selbornians will find much to their taste, as, for example, the passage from Plutarch, which tells how the "gentlenesse shewed unto brute beastes commeth from the very fountaine and springe of all cortesie and humanitie which should never drye up in any manne living."

In one particular, however, as we have said, this volume yields nothing to its predecessor, but rather surpasses it—we mean in the numerous beautiful verses which are scattered up and down its pages. We should like to see a selection of these, with some from the *Day-Book*, and others which Mrs. Maitland may have in reserve, made into a little book by themselves. Separated from the body of the *Gazette*, with which they have no especial connection, and daintily printed, they would make a charming little pocket volume, and in that form would attract a new circle of readers. Most of them are connected with the flowers and the seasons of the year, with their various suggestions and associations; often as these subjects have been treated in verse, Mrs. Maitland has added now a note of her own, now an echo from an older singer, which presents them in a new, or at any rate a charming, light. Here are two verses from

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* Elliot Stock. Price 5s.

† *The Saltonstall Gazette*, conducted by Peter Saltonstall, Esq., and written by various hands, by Ella Fuller Maitland. (Chapman and Hall). Price 7s. 6d.

"In the Garden."

"Behold how is the garden now most sweet
With garlands gay;
Behold how blossoms fair come forth to meet
The touch of day;
How, when from every dewy lawn,
Night's dusky veil aside is drawn,
Fresh treasures with the morning's dawn
Our visions greet.

Behold how snowy Pinks have damasked o'er,
The fragrant ground;
How all around the silver-fretted floor
Are Roses bound;
How Lilies silently unfold
Buds, in the purest whiteness stoled,
And blazoned with the fairest gold
Of Summer's store."

And here is a little poem of

"Summer and Winter Weather."

"When once again the year her promise keeps
And days and nights in sultry stillness steeps,
When seas of golden Corn the valleys fill,
And dusky Roses are unfolding still
Sweet hidden fastnesses of fragrant fire,
Hushed into silence is the small birds' choir;
And withered leaflets, faded, sere, and brown,
Come falling lightly 'mid the Roses down.

"When Winter's lusty breezes once more blow,
Tossing the barren branches to and fro;
When waters lie in silver fetters dight—
Bound by the white hands of the treacherous night—
From out bare boughs brave throstle 'gins to sing
The joyous lays of an approaching Spring,
And smiling, Pan the sodden earth besets
With tender floods of sweetest Violets.

"So hopes and fears for ever ebb and flow,
And so all times things sweet and bitter show."

If Mrs. Fuller Maitland will bring together these and other verses, we can promise them a hearty welcome.

SHORT NOTICES OF BOOKS.

Wild Bird Protection and Nesting Boxes. With illustrations of various designs of boxes, brackets, &c., that have actually been used by wild birds for nidification. And a full list of the orders made under the "Wild Birds Protection Acts" on the application of County Councils, with the names of the species protected. By John R. B. Masefield, M.A. (Leeds: Taylor Brothers, 1897, pp. 129, 8vo, price 5s.) The somewhat lengthy title of this excellent little book sufficiently indicates its contents, which will prove of the greatest interest and service to all those who concern themselves with the preservation of our native birds. In the first part, the author deals with the various Acts passed for the protection of birds, dwelling especially on those now in force. As an accurate knowledge of the state of the law is desirable for bird protectionists, but not always found in them, this chapter will be a welcome boon to some of us. We well remember, some years ago, a Justice of the Peace contending with us that all birds' eggs were protected by the Act of 1880; and he added that he *had known a conviction!* As he hailed from Mr. Masefield's part of the country, the

author has perhaps met a pressing want. Another chapter deals with Mediæval Bird Laws, some of which enjoined the destruction of certain of the crow family; and the laws of the Victorian and Elizabethan ages are compared. But, as the author points out in his introductory remarks, beyond legislature, the private protection of areas as asylums, and the discouragement of feather wearing, another means of protection for our wild birds is that of providing them with facilities for nesting, such as nesting boxes, ledges, holes in trees or walls, thickets of shrubs or rank vegetation. The author has in this way induced no less than thirty-six species of land birds to nest in and around his garden, shrubbery and buildings, and the third part of his book gives us information from actual experience on the subject, as to the best means of carrying out this work. Every page should be studied carefully by those who wish to have birds' nests in their gardens, for they will find all sorts of hints and information as to making their grounds attractive to birds and making the latter comfortable. Moreover, the book is beautifully illustrated, not only by nine full-page collotypes of most charming nesting sites, but also by numerous woodcuts (party in section) of suitable and useful nesting boxes. As to the hindrances to be met with in our endeavours to protect birds in the nesting season, the three most formidable are stated to be the small boy egg pilferer, the cat, and the house sparrow. For the second and third of these, the only real cure seems to be a drastic one; for the first there seems to be no reliable cure, for the "salutary chastisement" in these days is too often called something else in a summons! The last portion of the book consists of an enumeration of the various orders made by a Secretary of State under the Acts of 1894 and 1896; complete for the time being, and especially useful to naturalists visiting different parts of the country. O. V. A.

The Concise Knowledge Natural History, by R. Lydekker, B.A., F.R.S., V.P.G.S.; R. Bowdler Sharpe, LL.D.; W. F. Kirby, F.L.S., F.E.S.; W. Garstang, M.A., F.Z.S.; B. B. Woodward, F.L.S., F.G.S.; F. A. Bather, M.A., F.G.S.; R. Kirkpatrick; R. J. Pocock; and H. M. Bernard, M.A., F.L.S.; with 530 original illustrations by J. Keulemans, F. H. Michael, Ernald W. Miles, Frank C. Aldworth, and other artists., pp. xvi., 771, 8vo. Price 5s. (London: Hutchinson & Co., 1897.) This volume of the Concise Knowledge Library is edited by Alfred H. Miles, and is a "Natural History" in the old sense of the word; that is to say, it treats only of the various departments of zoology, or what in more old-fashioned days was styled the animal creation. But it is not in the least old-fashioned in anything more than its name. The days have gone by when one man used to attempt to write a history of birds, beasts and fishes, as well as creeping things; and the present encyclopædia of the animal kingdom is written by specialists, all of whom are distinguished as authorities and as original investigators. Another great advance made in this cheap and popular work is the substitution of original illustrations for those time-honoured figures which are so often hashed up for our entertainment. The new illustrations are very useful, for although they might have been a little more clearly reproduced, they do represent the animals, the names of which are to be found below them. The body of the work is preceded by a useful systematic index, and the whole seems to be what it aims to be, namely, "a concise and popular Natural History, at once accurate in statement, handy in form, and ready of reference." It is well and clearly printed, and should find a place on the bookshelves of every Selbornian.

O. V. A.

The jaded Londoner, enervated by the heat of summer, is under no small obligation to those who babble to him of green fields, and put within his reach practical facilities for making the most of his time on the few occasions when he manages to escape beyond the confines of the bricks-and-mortaropolis, as the man in the play called it. Our thanks then are due to Mr. Holliday for his second contribution to the series of rambles *Over the Northern Heights*. (R. E. Taylor & Sons, 19, Old Street, E.C., price 6d.) This little book describes with care a number of attractive field walks in the neighbourhood of Windsor, Burnham Beeches, Uxbridge, Stoke Poges, &c.

A. G.

The Artist (A. Constable & Co.) for July is a "special 'Nature' number," and is well worth the 1s. (net) charged for it. It contains a number of reproductions of pictures and drawings of animals and birds by Mr. Archibald Thorburn

and the Swedish painter, Bruno Liljefors, as well as a large and valuable series of studies by Mr. Ruskin, reproduced here by the permission of the University of Oxford, whose property they are. Suitable letterpress is supplied by Mr. A. Trevor-Battye.

Mr. W. J. Stillman has published a delightful account of two squirrels, *Billy and Hans*. We have not, however, received a copy for review, and space will not permit us to notice books not sent for the purpose.

SELBORNIANA.

Cats and Young Birds (p. 138).—The most simple way of protecting nests from cats is to fix wire-netting a few feet from the ground round the trunks of the most attractive trees. The coarsest netting is strong enough, and allows the autumn leaves to fall through best. The ordinary width of wire is sufficient, and by pleating and tying one edge close round the trunk, the other edge can be spread out like a basin and fastened here and there to the lowest branches. No cat can then climb the tree. I did this two or three years back to three trees, in two of which nests had been disturbed. Since then, out of sheer perversity, no birds have built until now, when I am pleased to find a pair of blackbirds have been for some days busily carrying food to one of the trees. As it is so late they must either have their second or third brood, or have been disturbed elsewhere.

Hampstead. E. K. Hitchcock.

As I suffer from the cat nuisance I have adopted a simple protection which has saved the lives of hundreds of birds. After placing my homes up among the branches I fix wire-netting firmly round the trunk, the outer edge projecting outwards on the same principle as an open umbrella. The cats run up but meet with this obstruction and come down again. I have quite recently saved thus two broods of redstarts and a brood of flycatchers. These and many others this season owe their lives, and the lives of their young, probably, to this little act of love for the birds.

James Hiam.

The "Zigzag" at Selborne.—Mr. G. Maxwell writes from Selborne to know whether any members of the Selborne Society will contribute towards the repair of the "Zigzag." A sum of about £25 is required, about half of which has been promised. Donations may be sent to Mr. Maxwell as above.

The Royal Buckhounds.—In the House of Commons on July 17, Mr. MacNeill asked the Home Secretary whether his attention had been directed to a Resolution passed at the annual meeting of the Humanitarian League last April, deprecating the hunting of tame deer as a practice viewed with abhorrence by a large number of Her Majesty's subjects, and praying that the Jubilee might be signalised by the discontinuance of the Royal Buckhounds; whether he was aware that in December, 1896, a letter was addressed to the Marquess of Salisbury, signed, among others, by the Archbishop of Canterbury, expressing regret that another season of tame deer hunting by Her Majesty's Buckhounds had been inaugurated; and whether, in view of the strong objections which had now for several years been finding utterance against the continuance of tame deer hunting, any steps woul be taken for the abolition of the Royal Buckhounds. Mr. J. Collings (in the absence of the Home Secretary) said:—The answer to the first two paragraphs is in the affirmative. In reply to the third paragraph, the Secretary of State can only say that there are as many people who desire the maintenance of the Royal Buckhounds as there are who desire to abolish them.

The Protection of Birds.—It is a matter of regret to us that the constant and growing demands on our space do not allow us to record as fully as might be wished the work of those who labour in the same direction as ourselves. This is especially the case with regard to the admirable Society for the Protection of Birds, whose reports and publications we duly receive, and are always hoping to notice. The following extracts from the Report for 1896 may serve to show that we have not overlooked the excellent work the Society is doing.

"*Birds and Fashions.*—With regard to the use of birds and feathers in personal adornment, there is perhaps some comfort to be extracted from the fact that the grosser, more repulsive forms of this mode are undoubtedly less often seen now than in recent years. This change for the better has come about in spite of the efforts of milliners, drapers, and the writers of veiled advertisements in the fashion columns of many journals. It must now be generally known that the wearing of stuffed birds on hats is regarded with feelings of extreme disgust by a large and constantly increasing portion of the public. And that knowledge has not been without effect. The trade in stuffed birds has declined enormously. Those who continue to offend by exhibiting such barbarous ornaments as gulls, terns, parrots, or paroquets, and various other stuffed birds, in their hats, can but excite surprise rather than admiration.

"'*Ospreys.*'—In the lamentable passion for wearing 'ospreys,' or aigrettes of white herons' feathers, there is unhappily but little change. The fact that a few of the finest samples of these plumes have been sold in the London feather-market at the enormous price of £10 per ounce, affords strong evidence that the white egret is still being pursued to extermination in the distant regions where it is found, for the sake of its few ornamental or nuptial feathers.

"*Larks and Lapwings.*—The excessive destruction in this country of two favourite species, the lark and lapwing, is a matter of concern to all lovers of wild bird life. With regard to the first, it is satisfactory to find that the recently established British Supply Association declines to supply larks to their customers; and it is to be hoped that this excellent example will be widely followed. The lapwing, peewit, or green plover, is now known to be decreasing throughout the country, and Sir Herbert Maxwell has repeatedly pointed out that this beautiful and useful bird cannot stand the present excessive drain on its numbers. In the *Times* (September 7, 1896), he writes that the 'peewit is the only wild bird of which omnivorous man eats both the eggs and the adults. This is not fair play, and it is, besides, a most wasteful and senseless proceeding.'"

NATURAL HISTORY NOTES AND QUERIES.

The Great Northern Diver.—May I be allowed to say that Mr. Aplin's remarks, as appended to my notice of *facts*, appear to me somewhat peremptory (if not discourteous)? I nowhere asserted that for certain that bird did breed in Sutherlandshire. But in defence of those who think it may occasionally do so, I demur to the assertion that the *frequent* presence of the bird is "no evidence whatever." It is not demonstrative, but it is fair probable evidence that the fact may be so. Some one appears to have said (the sentence, "while that a pair . . were actually breeding" conveys no clear meaning) that a pair bred in Sutherlandshire in 1868. My experience is of *Sutherlandshire*: gathered in many ramblings there, some of two months' duration. I know well almost every hill, stream, glen, and loch from Ullapool by coast to Lochinvar, Cape Wrath, Durness, Loch Erriboll, thence to Lairg, Oyhel Bridge and Ullapool again, by walking experience. If an expression of what may be possible, or information as to facts, from such knowledge during forty-two years past, is disparaged as valueless in your pages, I have no wish to give it, nor shall trouble myself to do so any more. Further (as I think), if "it is an inaccuracy to say that the northern diver breeds in the North of Scotland," it is equally an inaccuracy "in the present state of our knowledge" to say that it does *not*.

W. C. Green.

I do not think my remarks were either peremptory or discourteous; and I should like to point out that they did not refer particularly to Mr. Green's communication, but to the subject generally. I must repeat that until it has been satisfactorily *proved* that the northern diver breeds in Great Britain, it is an inaccuracy to say that it does so. It should be remembered that in my notes I have been defending myself from a charge of inaccuracy in my review of *Birds from Moidart*. On p. 92 I have pointed out the generally accepted belief

shared by me. Dr. Bowdler Sharpe, writing of this species in his recently published *Handbook*, could only say "it apparently breeds in the Shetlands," and repeats the evidence to be found in Mr. Saunders' *Manual*.

O. V. APLIN.

[This correspondence is closed.—ED. *N.N.*]

Sparrows and Thrushes.—A day or two ago my attention was called to the actions of a sparrow that was dancing attendance on some thrushes. The sparrow followed first one thrush, then another, keeping within a few inches of them as they were searching for food on my lawn. It was the afternoon, and as there had been no rain, worms were not so much the object of their search as a small chafer, which just now is to be found in quantities a little below the surface of the ground. When a chafer is discovered the thrush has to work hard to clear a way to get it out of the turf, and on bringing it to the surface adopts the same plan as after a struggle in pulling a worm out of its hole; that is, it drops the chafer on the ground for a few moments, either to take rest or in the belief that its prey is secure. Then it was that the object of the sparrow's delicate attentions showed itself. The moment the chafer was dropped by the thrush it was seized by the sparrow, which flew to some little distance to devour its ill-gotten prize, only to return in a minute or two to repeat the theft. I saw this trick practised on three or four thrushes for an hour without remonstrance on their part, and it was the coolest bit of passerine impudence I have ever witnessed.

Market Weston, Thetford. EDMUND THOS. DAUBENY.

Cuckoos.—The cuckoos delayed their departure a few days longer than usual this season. I last heard one on July 1, while one or two were reported to me on July 3. I noticed a young cuckoo yesterday (July 8) being diligently fed by a hedge-sparrow.

Redditch. J. HIAM.

TO CORRESPONDENTS.

C. R.—(1) *Polygala depressa.* (2) There is no recent monograph. (3) We cannot modify the Rule, but an exception may be made when necessary.

W. J.—(1) *Scleranthus annuus.* (2) *Lepidium ruderale.*

A. R.—*Saponaria Vaccaria.*

S. G.—*Handbook of British Birds*, by Dr. Bowdler Sharpe (Allen & Co., 4 vols., 24s.).

J. C. T.—The report has not reached us, but we cannot find room for sermons, however excellent.

Sydney.—The birds seen in Richmond Park were undoubtedly redstarts.

B. S. W.—Contributors to *N.N.* are not paid.

A. L. S.—We regret the omission. See answer to B. S. W.

[The Editor is in no way accountable for the delay in issuing the present number; the responsibility for this rests with the Magazine Committee.]

RULES FOR CONTRIBUTORS AND CORRESPONDENTS.

1. All communications for NATURE NOTES must be authenticated with name and address, not necessarily for publication.

2. The return of unaccepted contributions cannot be guaranteed. We cannot undertake to name specimens privately, or to return them.

3. All communications for the September number must be in the Editor's hands by the 10th of August.

4. Communications for NATURE NOTES should be addressed to the Editor, JAMES BRITTEN, F.L.S., 126, Kennington Park Road, London, S.E., as should specimens for naming, books for review, &c. The Editor cannot undertake to reply privately to questions.

5. Letters connected with the Selborne Society, as well as all inquiries as to the supply of NATURE NOTES, and subscriptions, should be addressed to the Secretary of the Selborne Society, A. J. WESTERN, Esq., 20, Hanover Square, W.

6. The Editor is not responsible for the contents of the last page of each number; communications respecting that page must be addressed to Mr. WESTERN, as above.

SELBORNE SOCIETY NOTICES.

SPECIAL APPEAL.

To the Members of the Selborne Society.—The income of our Society is at present insufficient for its needs. In respect of last year the adverse balance will, after arrears have been received, be about £83. It is not possible to reduce the expenditure (now very small, after the cost of supplying NATURE NOTES to the members has been met) without weakening the efficiency of the Society. But more. It is most desirable to increase the expenditure, if possible. Again and again are opportunities lost for want of means; and it is to be noted that no increase of income would involve the smallest increase in office or working expenses, but would be wholly applicable to the direct promotion of the purposes of the Society. There are two ways of supplying the treasury—by the enlargement of present subscriptions, and by the enrolment of new members. I venture to suggest to all members that they should use both, and in the case of additions to subscriptions, though they will not be payable until January, to notify the same immediately to the Secretary. Experience teaches that a cause, however good intrinsically, will be served by the organization of a body of its friends as a visible, speaking Society; so may the Selborne Society flourish!

J. L. OTTER,
Hon. Treasurer.

Donations.—The Council acknowledge with thanks the receipt of the following donations towards the reduction of the deficit:—Miss M. A. Penning, 21s.; Miss Turle, 5s.; J. F. Williams, Esq., 5s.

Field Club Saturday Rambles:—

August 7.—Belmont (Surrey) to Woodcote Downs and Coulsdon Station. Victoria, 2.13, London Bridge (L.B.S.C.R.) 2.0. Take single tickets to Belmont, where meet at 3.13. Tea at Coffee House, near Coulsdon Station. Guide, Mr. E. A. Martin.

August 14.—Leave Uxbridge Station (at about 3.40) on arrival of train leaving Paddington at 2.50: Ealing Broadway, 3.6; Broad Street, 2.20; Willesden, 2.52. Walk to Harefield by the Canal and Colne, returning *via* Denham. Tea at the Inn by the Asbestos Works, Harefield. Guide, Mr. Ravenshaw.

August 21.—Broxbourne and Wormley West End. Train leaves Liverpool Street at 2.15, arriving at Broxbourne 2.46. Walk to Wormley West End, where tea will be taken at 6 o'clock at the "Woodman" Inn. Returning from Broxbourne Station 8.47 (arrives Liverpool Street 9.20). Excursion ticket, 1s. 6d. Tea, 1s. Guide, Mr. S. Austin.

August 28.—Rye House to Nether Hall ruins (Tudor architecture). Tea at Roydon "Fish and Eels" Inn, 5 p.m. Train 2.15 p.m. Liverpool Street. Day ticket, 1s. 6d. The Guide, Mr. W. Blyth Gerish, will read a short paper.

September 4.—Over the Addington Hills. Meet at Elmers End Station at 2.58, Cannon Street 2.18, London Bridge (S.E.R.) 2.21. Tea at Sandrock Hotel, Shirley, about 5. After tea walk over the Hills to Coombe Lane. Take single tickets to Elmers End. Guide, Mr. Martin.

Council and Committee Meetings.—The next meetings of the Council will be held on Tuesdays, August 3, and September 7, at 5.30; of the Magazine and Leaflet Committee on August 17, and September 21, at 5.30; of the Finance Committee on August 17, and September 21, at 6.15.

ANNUAL PAYMENT FOR 1896.	*For Magazines.*
Richmond (part payment)	£20.

Excursion to Selborne.—A party of about fifty visited the shrine of Gilbert White on Saturday, June 12. Train was taken to Liphook, whence the party drove through the lovely district of Wolmer to Selborne. High tea was taken at the "Queen's Arms," where every provision had been made in a most satisfactory manner for the party. An address was given by the Rev. Prebendary Gordon. Visits were paid to the Church, the Lythe, the Hanger, The Wakes, &c., after which the return journey to Liphook was made by wagonette. The following Branches were represented: Clapton, Ealing, Havant, Kensington, Northern Heights, Portsmouth, Southampton and New Forest.

EDWARD A. MARTIN, F.G.S.,
Hon. Sec. Magazine and Leaflet Committee.

Nature Notes:
The Selborne Society's Magazine.

No. 93. SEPTEMBER, 1897. Vol. VIII.

HOW BIRDS LEARN TO MAKE NESTS AND SONGS.

AN interesting question often arises as to how birds come to make the nests they do, and sing the several songs peculiar to their species. Many of these nests are, we know, very elaborate structures; and the songs that some of the birds sing live for ever in poetry, as well as in the memories of all who delight in country sights and country sounds. And the question arises, quite naturally, how do the birds get to do these things? Is the nest-building taught by their ancestors to thrush, chaffinch and long-tailed tit; and are the songs handed on to skylark, or blackcap, or nightingale, from one generation to another? These questions, though they press for solution, do not often, if at all, meet with the consideration that they so admirably deserve. People are fond of answering such questions, off-hand, by saying they are done by instinct; but this is a simple way of getting rid of the question altogether; and it is in much the same way that the origin of some fine structure on earth is unhesitatingly ascribed to the Druids, or to that mighty constructor, the Devil; and this habit gives us Druid's walls or dykes, and Devil's punch-bowls or bridges, in various parts of many lands. Inquirers seldom pause to consider what instinct is, wherein it differs from reason, and whether, for instance, man may be considered to possess and use this faculty. Instinct may be fairly defined, for our purpose, as the performance of complex acts, absolutely without instruction or previously acquired knowledge; and if we look to the recognized authorities to ascertain what they suppose may be accomplished by instinct, we find that they differ *toto cælo*. One very high authority, who has written on mental evolution

in animals, says, very definitely, that "the singing of birds is certainly instinctive." Another is of opinion that "notes in birds are no more innate than language is in man, and depend entirely on the master under which they are bred, as far as their organs will enable them to imitate the sounds which they have frequent opportunities of hearing." Between these two diametrically opposite opinions we find every intermediate view displayed and advocated. The experiments that have been made to test these opinions differ almost as widely in their results as the views themselves; thus, on this subject, we are entirely left to form our own views.

A consideration of all the circumstances may, perhaps, lead us to the conclusion that instinct may be best regarded as a plastic faculty; and that any particular action that we may consider may be looked upon as resulting in part from instinct, and in part from intelligence or reason. The sparrows used originally, no doubt, to build their nests in trees, and then, in order to be secure, they had to pay attention to structure; but when, by and by, they had learnt to make their nests in the corners of house-roofs, they soon found that they could save themselves a lot of trouble in construction by building their nest as loosely as ever they liked. And this saving of trouble in nest-building is one of the things that birds seem to learn the readiest of all. Some young chaffinches were once taken very early out of the nest, carried to New Zealand, and there turned out. At home, we know they build some of the loveliest of all nests; but in New Zealand they built a loose nest lined with feathers, in the fork of a tree, wherefrom it hung down a foot from the side of a supporting branch, thus forming a nest totally different from the compact structure that they always make in England. They had there probably imitated the nest of some New Zealand species. Such an experience as this would seem to show that birds do not make their nests by blind instinct, but by imitating some nest that they have seen near them.

If instinct means anything definite, it must mean the capacity to perform complex acts without teaching or experience; thus such a pretty piece of work as a chaffinch's nest we might surely expect to be done, if done by this faculty, in the same way in whatever part of the world it is constructed. On whichever side we approach the subject, it is beset with difficulties. We can see quite surely that birds learn much as time passes on. Since the invention of churches, jackdaws have, as we well know, got fond of the steeple. House and chimney swallows must have largely changed their habits and modes of building since the multiplication of the houses in which they love to take up their abode. This leads us to inquire whether there is much, if any, difference between the faculties exhibited by birds in building nests, and those shown by man in constructing his own dwellings; the phenomena presented in the several cases seeming to indicate no essential difference in the kind or nature of the mental

faculties employed. Birds build their nests badly or in unsuitable places, just as men, we know too well, often construct houses imperfectly, or in places where they ought never to have been put. In high winds, eggs often drop out of rooks' nests; and a cat may sometimes stalk off with young birds from some unsuitably-placed nest. It would seem too elaborate, perhaps, to cite Mill's sensationalism and the philosophy of experience, seeing that in the construction of birds' nests, no evidence can be found to show the existence of anything beyond the reasoning and imitative powers that animals are admitted to possess.

They make use of the things they find at hand, or that they may themselves be able to supply, just as we expect human beings to do. Swallows, swifts, and song-thrushes use their own saliva in building their nests; and the thrush's nest, when well built, is quite a work of art, and well worthy of notice, as I can myself testify, after having carefully watched the building of a perfect beauty of a thrush's nest, for two successive years, in my own garden on the banks of the Thames. After placing, first of all, a fundamental structure, with a hollow about the size of a teacup, largely of moss and such soft substances, wrought into a rounded form by intermingled straw, or small roots, or stems of grass, there was put in, by the thrushes, at the brim, a thicker band hooped round like the mouth of a basket. All this was carefully intertwisted and delicately fastened into proper positions here and there by the bird's own saliva, which made a nice nest of the cup itself; but at last there came the laying on of a lining, which made the finest part of the work. Within the cup, the bird first laid on, and fastened to the frame by his glutinous matter, a layer of mingled mud and horse-dung, thicker at the bottom and thinning out towards the top, all rounded with amazing smoothness by the thrush's bill. For innermost coating, short slips of rotten wood were used, firmly glued on by the same cement, and bruised flat so as to thoroughly accord with the smoothness of the surface whereon it was laid. When thus finished, the lining was like pasteboard, hard, smooth, tough, and watertight, while thoroughly warm and comfortable, furnishing a structure admirably fitted to protect the eggs during the bleak winds of early spring.

All this I observed with as much care as I could, without at all disturbing the birds. With them I had, at last, got so familiar that the hen-bird would let me stroke her back as she sat on the eggs. They had chosen a pleasant spot for their nest and as I was very careful to keep all cats away from the garden, it was a very safe one. It was the same pair that built the second nest, which was near the first one; but the birds, I noticed carefully, made no attempt to repair the former nest, as rooks would have done. And I thought the second nest was, in some respects, a little better than the first, as if the builders had learnt something in the year.

And as I watched all this, I could not help thinking that

many a farm-labourer dwelt in a far worse constructed house than the one that had been built for their family by this pair of thrushes.

After these two years' nests had been built, there took place periodical illuminations of the Thames, sometimes closing with fireworks; and all this drew crowds of sight-seers from London to the banks of the river. The wise thrushes then moved their nests farther off, at the same time that the nightingale moved away; and as I should like to have done myself, if I could have chosen my site for a dwelling as easily as these birds. Thereafter, though other birds, such as robins and tits, still built in the boxes supplied in the garden, and thrushes and blackbirds often came there to be fed in winter, or to gather snails and worms at other times, these thrushes built there no more.

It is difficult to draw an exact distinction between what we agree to call instinct and what is designated reason, in regard especially to the construction of dwellings. The most common idea seems to be that human beings act from reason, animals from instinct. If, in doing a certain thing, we adopt means to effect it, and have a clear and precise notion that those means are directly subservient to that end, we are supposed to act from reason; but if we are not conscious that the means adopted *are* subservient to that end, then we call the action instinct. Consciousness of means being subservient to end is usually regarded as the distinguishing characteristic of reason; but between the uniform performance of instinct and the conscious knowledge of reason there is a vast field of human and animal activity. Some writers are getting to portion the field into a threefold division, comprising instinct, reason, and intelligence. Men and animals, they say, come into the world with an innate capacity for response to certain stimuli. This is part of their organic inheritance. If the response be at first an accurate and adequate response, we call it instinctive. The responses often have a variable amount of inaccuracy and inadequacy; in such cases the animal has a power of selective control over the responses; and this power of selective control in the activities essential to daily life is supposed to constitute the first stage of intelligence. Unlike reason, intelligence implies no conscious knowledge of the relation between the means employed and the end attained, though it may be exercised in selective adaptation to ends novel to the individual and to that of the species.

Intelligence is considered to be the faculty by which, through experience and association, activities are adapted to, or moulded by, new circumstances; while reason has its power in the true grasping of relationships themselves. Intelligence is ever on the watch for fortunate variations of activity; it proceeds by trial and error, and selects the successes from among the failures. Reason explains the suitability; it shows wherein lies the success of the one and the failure of the other, and adapts its conduct through a clear perception of the relationships involved.

Individual experience, association, and imitation are the main factors of intelligence; explanation and intentional adaptation are the goal of reason.

The activities of instinct are those in which there is no variability, and in which, therefore, there is no necessity for any intelligent acquisition of skill; thus, though animals, when acting from instinct, adopt means subservient to the end to be attained, and are uniformly found to do so, they are not in the least degree conscious that these means *are* subservient to the ends. An instinctive action originates in the brain, and is probably accompanied by consciousness; but there is no conscious working towards an object in view.

The subject is, however, beset with difficulties, which such considerations as these do not enable us to overcome. It is very difficult to distinguish between what birds learn, and what they seem to know by some innate faculty. Pheasants have been found to feed quietly while rifle balls were passing over them; they have either learnt to distinguish between a shot-gun and a rifle, or are acting from utter greediness. Frank Buckland gives an account of a fisherman's drawing up his line suddenly and whipping out the eye of a pike, which at his next cast, the eye still on the hook, was gulped by the bleeding pike. Swifts, swallows, and martins have, in comparatively recent times, learnt how to avail themselves of barns, chimneys and house-roofs; and similar adaptabilities have been shown by other birds. The single note of the cuckoo is, no doubt, the very easiest for such a bird, as for all boys, to make, and this we may take to be a good reason why, amid all the chorus of the woods, the cuckoo adopts this cry.

Then again, we must recognize that some birds have a sense of beauty, and derive pleasure from objects that are to them, as to us, delightful to the eye. The humming-birds decorate their nests with great taste, weaving into the structure pieces of lichen; and the bower-birds collect flowers and fruits of bright and varied colours wherewith to decorate their home, and are careful to strew the ground with tender moss, and to get rid of all unsightly things from their vicinity.

Thus, save in moral matters, and such things as truth and falsehood, it is difficult to see what, in fact, it is that really *does* lie beyond the limits of animal intelligence; and even here some animals seem now and then to show themselves quite conscious that they have done wrong.

Perhaps in regard to song, we may not be far wrong in thinking that, in birds, the knowledge of it comes nearer to instinct than anything they do; that, as a rule, it needs simply to be awakened, and that the awakening is easy; if the bird hears his own parent sing, he picks up the song so soon that it seems absurd to speak of the learning as instruction; if he hears other birds sing, he no doubt learns to imitate them, but the process is often a long one, and the foreign notes are only an addition to his own proper song,

which can still be clearly made out; and that when he actually learns another bird's song, his own song is in general still traceable.

After all, we shall probably find it safest to say that, in regard to the making of nests and songs, birds acquire their knowledge of both in much the same way that human beings do; there is really little difference between the modes in which such knowledge is acquired. Caves, mud-huts, and pile-dwellings existed for ages, with little alterations or improvements; and in some countries such things continue to exist at this very day. It took men many centuries to rise from rudest music, learned perhaps at earliest from bird-songs, to the music that we now delight in; and improvements in both architecture and music are still going on. Why may it not be something the same in regard to birds? We may be quite sure that, though following some general type, songs and nests vary much in different places. The materials from which nests are formed may be far more plentiful in one place than in another; the powers of the builders as to beak, legs and feet may vary; and the organs of song in one bird may be very much more powerful than in another. And who can say that though men may, in former times, have learnt from bird-songs, the birds may not, in their turn, have learnt from the music made by men and women? German canaries, when very young, are taught to sing by musical instruments; and they become, by such training, the very best of home-singing birds; and a very slight acquaintance with cage birds shows us that a bad singer readily learns from a good one, if the training is begun in early youth.

Far too much is, in our days, referred to instinct by people who do not quite comprehend what instinct really is. Savages are often said to find their way through trackless regions by instinct, and to effect by this faculty many things which it is beyond the power of civilized man to do at all. Now the fact that savages find their way through forests they have never traversed before can be quite easily accounted for without any reference to instinct, which has nothing to do with this power. To call in the aid of a new and mysterious power to account for what could be performed by the aid of observation, memory, and imitation, is quite unnecessary, and should at once be given up.

By crediting birds with the same faculties, and the amount of reason that we cannot refuse to accord to them, we may learn that it is from these powers, and not from blind instinct, as it is usually termed, that there arise the pretty nests that some of them are able to build, and the sweet songs that we so much love to listen to.

Nestling linnets have been trained by placing them under skylark and woodlark; and in every case the young birds have invariably caught the note of their instructors. A goldfinch taken from the nest when two or three days old, was hung at a window opposite a small garden where there was a wren's nest,

and it had there caught the exact notes of the wren, and had entirely lost even the very call of the goldfinch. And a common house-sparrow, whose own note is, as we know well, but a common chirp, when brought early up near a goldfinch, had entirely learnt the note of this bird. Even the nightingale is apt, in confinement, to learn the notes of other birds in place of its own beautiful song. A redstart has been known to imitate the song of a caged chaffinch; and the bullfinch, whose natural notes are weak, harsh, and insignificant, has a wonderful musical faculty, and can, as we well know, be taught to whistle many complete tunes. Such facts as these, which may be multiplied indefinitely, lead us to suppose that birds learn their songs much as we learn languages, our own or foreign ones. Some birds learn more readily than others, just as human beings do; and some have far better organs of song than others; for the faculty of acquiring notes there seems no valid reason for assigning to birds any other faculties than those that we ourselves possess.

It is much the same with regard to the formation of nests. Experiments, such as those with the chaffinches in New Zealand, seem to show that nest-building and house-building run on pretty much alike. Birds learn to build just as we do. Some are better builders than others, they are neater in their habits, or they have stronger legs, claws, and beak, or a more compact body; thus the nests vary in structure much as houses do.

A careful consideration of the whole subject may thus, perhaps, lead us to accord to the beautiful creatures from whom we derive so much pleasure faculties which, though in some respects inferior to ours, are yet not wholly different from our own. Reason, Intelligence, Instinct have been largely and learnedly discussed, and much variation has arisen in regard to what or whom these several faculties should be accorded to. And the more of these faculties that we grant to birds, the better would be presumably the treatment they would receive at our hands. From beings gifted with intelligence we should hardly dare to pluck plumes to adorn ourselves with; and the more that we accord to birds of the faculties on which we pride ourselves, the more should we assuredly refrain from all cruelty towards them, and the more should we be ready to extend to them the claims that they so amply deserve.

In an article on "Feminine Cruelty" in a recent medical journal, it is said that "it is a piece of almost proverbial wisdom that women are more cruel than men, and certainly the callous barbarism displayed by ladies of fashion and their imitators during the present season will go far to confirm the belief. Last year it was said that they had bought their hats before they knew that the feathers in them involved the destruction—sometimes under circumstances of great cruelty—of beautiful races of birds. But birds' feathers have reappeared this year, and the excuse now given is that the feathers are 'not real.'" After citing a letter of Sir W. H. Flower's in which this "absurd

subterfuge" is disposed of, the writer goes on to say that "these ladies who are priding themselves on their humanity are, as they would themselves say, monsters of cruelty, responsible for the wounding and maiming of myriads of birds, and the starving to death of countless families of nestlings." And he concludes by stating that "more suffering is produced to supply the bonnets for one garden party than in all the physiological laboratories of the world."

Now we should be very loth to believe of women what this medical journalist has here set forth. As mother, sister, wife, we love to think of them as the gentlest and kindest of all beings; and under their influence we look to receive and learn, in such matters as these, the very best instruction. Thus, we prefer to believe that what has been complained of results merely from inattention or inadvertence. The poet who "sang the song of the shirt" wisely tells us that

> "Evil is wrought by want of thought
> As well as want of heart."

We believe that it is from the merest want of thought that these dire results occur. The gentlest of all tenders of birds are women; they are the best of all feeders at trying times; and it is they that always succeed in winning the birds' best affections. When the beautiful white-winged doves of the sea were daily congregating by thousands on St. James's Lake, it was women that were the most assiduous feeders of these birds; and as one watched the pretty sight, saw some birds catch from women's hands pieces thrown from the bridge, and others standing on the ice, looking like some of Doré's groups of angels, it was no uncommon thing to remark that among those who were the most assiduous feeders, several had their hats adorned with the plumage of these very birds. It was, one may be sure, the merest inadvertence; and the incongruity did not, probably, ever occur to the wearers themselves. If we can get women to believe that these beautiful creatures who afford us so much delight have faculties somewhat like our own; that they learn song much as we do, build nests as we build houses, and sometimes, in these things, seem to surpass many of us; that they are not to be simply credited with "blind instinct," but have faculties that may rightly engage our sympathies; then it is to be hoped that women will refuse to adorn themselves with plumage plucked from gladsome parents whose progeny are, by their loss, left to hapless destruction, and that a feeling for better ways will be begun among women; and, if well begun, it will, we may feel pretty sure, be carried on to the perfection that all lovers of birds desire by a persistent energy that women are, in all things they take to heart, always proud to display.

Richmond-on-Thames. W. J. C. MILLER.

"STING CATERPILLARS."

A FEW days ago, while exploring among the small tea-tree scrub which is very plentiful hereabouts, I chanced upon an interesting and quite unexpected curiosity. Seeing upon a stem of the scrub a small square-looking object, of unfamiliar appearance, I examined it closely, and found it to be one of the stinging caterpillars (*Doratifera*) which are not infrequently met with in Australia, but which have not, to my knowledge, been previously reported from the island colony. They are uncouth-looking creatures, something under an inch in length, and of a four-sided build, but narrower on the upper side, or back, than at the base. The upper side is of a pretty emerald green, becoming purplish about the thorax and also near the opposite extremity; the underside is yellow, and is furnished with very tiny legs, scarcely visible without a glass. Ten transparent bristle-like appendages project from each side, the hindermost being much the longest; while from a ridge behind the head project two small horns. From the segments immediately behind these horns rise four protuberances, two from each segment, and four more from the hinder segments of the body. When the caterpillar is touched, it immediately pushes forth from these eight protuberances bundles of sharp filaments, yellowish in colour, with black tips, and bearing a strong resemblance to miniature porcupine quills. These are the organs from which the insect has derived both its scientific ("*Doratifera*" or "dart-bearing") and popular ("sting caterpillar") appellations.

A colonial authority states that if the skin be brought rudely into contact with these filaments, a continued itching, accompanied by some inflammation, *is said* to be produced. Wishing to test this for myself, I brushed the back of one of my fingers, where the skin is fairly soft, against these groups of spires on the caterpillar's back. A slight pricking sensation was followed by an "itchy" feeling, which gradually became worse and worse until it was intolerable, and caused me to fly to the ammonia bottle for relief; a little of this liquid applied a couple of times to the affected part soon took away the unpleasant effects of the little warrior's darts.

In connection with this caterpillar I may mention another with somewhat similar properties, which was encountered in the bush a few miles from here during the summer of 1895. A friend and myself were track cutting, and came upon the Flowerdale river at a most beautiful spot, a sort of basin surrounded by large "myrtles" (*Fagus*), immediately below which were great boulders of quartzite rock, over which the waters roared and tumbled, while blocks of the same hard white rock were strewed along the banks. Among these rugged boulders grew clumps of

the beautiful red Blandfordia lilies, and bushes of the snowberry (*Gaultheria*), while graceful leatherwood trees (*Eucryphia*), overhung the stream, bearing profusely their white saucer-shaped blossoms. Higher up the stream the banks were adorned with Christmas bush (*Prostanthera*), clothed with dark green aromatic leaves and white labiate flowers, purple-tipped. Here the shallow waters gently rippled over a gravelly bottom, and pulling off our boots, we forded the river without difficulty, and while sitting upon the other bank to "lace up," I was stung on the neck. On putting up my hand quickly to brush off the culprit, something fell down inside my shirt and stung me smartly on the chest. On being extracted, it proved to be a small black hairy caterpillar with red legs, not unlike a small edition of the well-known woolly bear. This larva appears to produce the effect by means of its hairy coating, as no special apparatus is discernible. The sensation is like being pricked with a red hot needle, and a red patch appears, accompanied by a slight rash, but the irritation passes off in from fifteen to thirty minutes.

With regard to the *Doratifera* larva, it was only in captivity a couple of days before it assumed the pupal condition, forming a small reddish cocoon in the corner of the box, the cocoon being held in its place by a slight web of silk. As the season is far advanced, the perfect insect should emerge very soon, unless it intends wintering in the cocoon; and I look forward with some curiosity to see what kind of moth my little stinging friend will produce.

Table Cape, Tasmania. H. Stuart Dove.

A STORM ON THE WIGTONSHIRE COAST.

WOULD that I had the pen of a Sir Herbert Maxwell or other accomplished writer on such subjects, when I try shortly to delineate for your readers the scene witnessed here this afternoon. The writer and three companions, one of whom was a lady, ventured forth, in spite of the elements, to the sea-shore, to visit what is known as the "Blow-hole" amongst the rocks on this coast. It lies about mid-way between Burrow Head and Glasserton Hill. What strikes one most in walking towards the shore is the manner in which the trees are almost levelled, as it were, by the force of the wind. There is one covert close to the sea, famous in years gone by, before the Ground Game Act, as a refuge for numberless hares, which, alas, now are seldom found. In this covert consisting of small oak and other hardwood trees a few struggling firs have, with great difficulty, forced their way, and they, with their hardier comrades, are completely sloped off from the direction of the prevailing wind and twisted into all manners of shapes.

The first thing one noticed on nearing the cliffs was the quantity of drifting white foam which the angry wind carried inland from a little creek, where the surf was churned up in so strange a way that the wind was able to take hold of it and carry it inland in great balls resembling nothing more than huge flakes of soft snow, which, owing to their lightness, were swept almost half a mile on to the sheep farm that here borders the sea. A little further on, a tiny creek or inlet was pointed out to us as the only comparatively safe place for a boat to take refuge in, one often used by smugglers in days long gone by; and made of iron must the nerves of any man have been, bold enough to attempt the passage of it if the sea was running high outside, the space between the rocks only being about ten yards, and the slightest mistake, of course, entailing certain destruction. The smuggler, safely landed, however, a ready means for getting inland himself with his goods was at hand, because a deep gulley runs from this little bay up through the farm; and by this route, hidden from everyone, he could safely transfer his ill-gotten gains to a place of security, from which they could easily be removed.

And now we come to the Blow-hole—a small hole, perhaps six inches in diameter, which acts as a kind of funnel to the cave underneath. In certain conditions of the tide, when the water rushes into the cave and tumbles and foams over the rocks, the air is forced with great violence out through this hole, causing a roaring sound something resembling a steam syren, sending a column of fine spray high into the air. To-day the tide was too full in, and the hole not at its best, when our party ventured out on the rocks to see it. But the scene all down the coast to right and left was one not easily to be forgotten; a vast belt of white foam stretching as far as one could see on either side—on the one, towards Luce Bay, on the other towards Wigtown Bay—the waves lashing themselves into a fury as they hurled themselves against the black sharp rocks which have withstood, and will withstand, so many awful winter storms. One could not but think of the terrors of such a coast to the poor man in charge of some ill-fitted schooner trying to beat her way and get round the point of the Mull and thus get shelter; no light on the coast, no life-boat near; even the sea-gulls seemed to have deserted this shore to-day, and no bird but a solitary black cormorant, which soon disappeared in the gloom as we watched him, could be seen anywhere. A warning wave, which dashed unexpectedly over us, soaking the entire party and making us feel helpless in the face of the prodigious power all round us, soon drove us back to climb on to safe ground again; but not before we had viewed in all their majesty the torrents of menacing waters, falling back, baffled by the wall of rock and showing their dismay by hissing on all sides, and thundering into the cave under our feet, a sight not soon to be erased from the memory of those who witnessed it.

Then we turned homewards, drenched it may be, but imbued more than ever with the majesty of the sea. We looked in

vain out into the closing gloom of the November evening for the warning lights which one ought to see, first on the Mull, then the red and white revolving light on the Point of Ayre, only sixteen miles away on the storm-beaten Isle of Man, then the Bahama light, and lastly that on the Rosses on the coast of Kirkcudbright, but none was visible. An involuntary prayer for those at sea on such an awful night came to the lips as we got into the shelter of the woods, and to the welcome fireside of friends, safe from the sea which ever lashes itself against Wigtonshire's rocky coast.

J. M. Wilson.

CHILDREN'S COUNTRY HOLIDAYS.

WE are glad to learn from the Secretary to the Fund that our appeal on behalf of this deserving charity has borne fruit. The accompanying summary of the work, with Mrs. H. M. Stanley's telling sketch, may remind some who have not yet contributed that it is not even now too late to remedy the omission.

PLEASE HELP US TO A COUNTRY HOLIDAY!

The Children's Country Holidays Fund selects from the 780,573 children attending day schools, both Voluntary and Board, throughout the metropolis, by means of ladies and gentlemen working from fifty different centres, who are able to take a friendly interest in the children. It was established in 1884, as experience showed that the efforts made by private people led to a very partial distribution of benefits. The children are sent for a fortnight to country cottages, which have been selected and are supervised by responsible friendly visitors in each village. There they share in the home life of the cottage, and get a far more close acquaintance with country objects and pursuits than they would in institutions. The parents are asked to contribute according to their means and last year paid £6,876—more than one-third of the cost, which is under 13s. a head (all expenses of transit and organization included). During 1896, from all parts of London, 30,224 children were sent away for not less than a fortnight.

Subscriptions should be sent to the Secretary, C. C. H. F., 10, Buckingham Street, Strand, W.C.

ALL ABOUT ANIMALS.

THOSE who consider the duty of Selbornians to lie in the direction of interesting the young in the wonders of creation, will find an important ally in the charming series of pictures now being brought out in numbers by Messrs. George Newnes, Limited. It is nothing less than phenomenal that it should be possible to purchase twenty large pictures of beasts and birds, reproduced from photographs by Mr. Gambier Bolton and others, with suitable accompanying letterpress, for sixpence, or—so long as the system of "discount bookselling" remains in force — fourpence-halfpenny. We imagine there are few Selbornian households in which *All About Animals* is not already a welcome guest; if such there be, the want should be supplied without delay.

The book is to be completed in twelve fortnightly numbers, and six of these are before us. The animals chosen for illustration are not confined to those with which we are familiar, although these naturally occupy a prominent place. The first number, for example, which is in some respects the most attractive, deals with lions, tigers and leopards; in the second we have no fewer than ten representations of the elephant, not only in captivity over here, but at work in India—"elephints a-pilin' teak." From these pictures children will learn more of the appearance and habits of animals than they could do from volumes of descriptions. The group of Rhesus monkeys—the "Bandar" of the Hindoos, familiar to all readers of *The Jungle Book*—figure in part four, and the group of flamingoes in the same number, may be cited as good examples of this kind of treatment, where several specimens, in various characteristic attitudes, are presented simultaneously to the eye.

We shall probably have more to say about the book when it is completed; meanwhile we would call attention to the use which may be made of these pictures in the way of decoration

for elementary schools. Four of them, with or without the accompanying letterpress, would go well together in a plain oak frame; the cost of thus preparing them would be extremely small, and they could be transferred from time to time from one room to another, thus causing that variety and renewal of interest which we think is sometimes too much overlooked by those who have charge of our schools.

By the kindness of the publishers we are enabled to give a specimen (much reduced) of the illustrations; the following, which will serve as an example of the letterpress, we select because of the interesting information it contains, although we demur to the name proposed for the animal.

"The British Kangaroo."

"Bennett's Wallaby is named after Mr. Bennett, one of the early Australian naturalists. We have called it the British kangaroo, because in several parks in this country it is now almost as thoroughly acclimatised as the rabbit; the two best known instances are at Haggerston Castle, in Northumberland, owned by Mr. Naylor Leyland, and in Sir E. G. Loder's park at Leonardslee, near Horsham, in Sussex. There the Wallabies, old and young, lie about and sun themselves like small deer. Nothing could be more surprising or unexpected than this thoroughly Australian scene under the oaks and beeches in an English park. They are out in the open all the winter. When disturbed they rush off just as rabbits do, going very fast, with long and graceful bounds, and then stopping to see if they are followed. The fur of many of the Wallabies is very soft and warm, and ought to make cheap and handsome rugs and linings for coats. But at present they are killed in great numbers for their hides only, which are sold in England to make patent leather boots. There are kangaroos of all sizes, some being no larger than rabbits. A tree kangaroo is now in the Zoo."

AMONG THE WILD FLOWERS.*

ONE drawback to the popularising of Natural History is the number of worthless books it brings in its train. Not only do folk write who have absolutely nothing to say, but they are not able to say that nothing in a graceful manner. It is bad enough when we find a book apparently constructed on the principle that it is the way of saying rather than what is said that is important; but what can justify the production of books which have not even style to commend them? Yet such volumes there are, though happily we have not now to consider them.

Mr. Higginson is not likely to write one of them; he knows the state of the case too well. "No person," he says, "can portray Nature from any slight or transient acquaintance. It may consume the best hours of many days to certify for one's self the simplest out-door fact, but every such piece of knowledge is intellectually worth the time." This is as it should be; would that all Selbornians understood it, as their model, Gilbert White, did! "How surprised the school children looked, when the Doctor of Divinity from the city tried to sentimentalize in addressing them about 'the bobolink in the woods'! They knew that the darling of the meadow had no more personal acquaintance with the woods than was exhibited by the preacher." Let us all avoid the bobolink of the woods.

In *The Procession of the Flowers* Mr. Higginson tells us in detail, and in charming style, how in America the wild blossoms follow one another. "In England," he says, "the march of the flowers is in an endless circle, and, unlike our experience, something is always in bloom. . . . Something may be gained, much lost, by that perennial succession; those links, however slight, must make the floral period continuous to the imagination; while our year gives a pause and an interval to its children, and after exhausted October has effloresced into witch-hazel, there is an absolute reserve of blossom until the alders wave again," and that is not until March! We are well content with our "perennial succession."

Full of observation as this little book is, we like our author best in his reflections and comments. Here is a passage which will commend itself to Selbornians:—

> It is no wonder that there is so little substantial enjoyment of Nature in the community when we feed children on grammars and dictionaries only, and take no pains to train them to see that which is before their eyes. The mass of the community have "summered and wintered" the universe pretty regularly, one

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* *The Procession of the Flowers, and kindred papers*, by Thomas Wentworth Higginson. New York and London: Longmans, price 5s.

Wild Flowers of Scotland, by J. H. Crawford, F.L.S. Illustrated by John Williamson. London: John Macqueen, price 6s.

Familiar Wild Flowers, by F. E. Hulme. London: Cassell.

would think, for a good many years, and yet nine persons out of ten in one town or city, and two out of three even in the country, seriously suppose, for instance, that the buds upon trees are formed in the spring; they have had them within sight all the winter and have never seen them. . . . But perhaps the best of us could hardly bear the system of tests unconsciously laid down by a small child of my acquaintance. The boy's father, a college-bred man, had early chosen the better part, and employed his fine faculties in rearing laurels in his own beautiful nursery gardens, instead of in the more arid soil of court-rooms or state-houses. Of course the young human scion knew the flowers by name before he knew his letters, and used their symbols more readily; and after he got the command of both he was one day asked by his younger brother what the word "idiot" meant,—for somebody in the parlour had been saying that somebody else was an idiot. "Don't you know," quoth Ben, in his sweet voice, "an idiot is a person who doesn't know an arbor-vitæ from a pine,—he doesn't know anything."

Birds are so greatly the favourites among naturalists that we are grateful to anyone who, like Mr. Crawford, will give the flowers a turn. He does not, like so many popular writers, repeat at second or third-hand certain stereotyped quotations from the herbalist whom it is usual to style "dear old Gerarde," nor does he fill up his space with equally hackneyed fragments of verse; he goes straight to the flowers and the places where they grow, and finds they have plenty to say for themselves. "In the Woodlands," "In the Links," "Up the Glen," "On the Mountains," such are the titles of some of his chapters; others deal more definitely with individual plants, as "The Bluebells," "Whin and Broom," "Marguerites and Poppies," and of course, being in Scotland, "Thistles" and "The Heather." There is nothing second-hand about this book; Mr. Crawford writes of what he has seen and known, and while always accurate, his style is artistic enough to please those who complain—there are such—that Richard Jefferies was a little too photographic.

To our own readers the Selbornian spirit manifested on so many pages of Mr. Crawford's book will prove a powerful recommendation. He is neither a fanatic nor a faddist: he does not wish to prevent the children gathering daisies and buttercups, and describes with keen sympathy their quest for the "cheeses" afforded by the receptacle of the thistle. Yet he is continually enforcing the lesson which some of us are doing our best to teach—that our rare birds and beasts and flowers should be among our most cherished possessions, and should be carefully and lovingly guarded against danger of extinction, the indifference of proprietors and the greed of gamekeepers, who are often "ready to supply whatever is wanted for a consideration," and even to guide the more liberal to the spot "where the rarities grow;" these, and the latter more than the former, are the forces which bid fair to destroy our rare alpine plants. "The footsteps of greed desecrate the stillness, and the hand of greed lays more waste even than curiosity or false enthusiasm. Where so many are anxious to possess and willing to pay, there are sure to arise sellers; and so quite a trade goes on."

"It might seem quixotic to suggest a close time for rare and beautiful plants to be fixed, as in the case of animals at the breeding season, when they are

flowering and seeding for another generation. But surely the same restrictions which guard our game should be placed around those vestiges of a glacial age which belong to Scotland because she is what she is, which existed before the Celts or even the earlier race, was dispossessed, and are still more a part of the scene than the grouse or the ptarmigan."

We believe that the rare *Pinguicula alpina* is carefully protected in its Ross-shire station by the owner of the estate which is honoured by its presence; and we hear this summer that *Spiranthes æstivalis* is similarly guarded in the New Forest. It may be hoped that this good example will be followed elsewhere, and that our rare plants as well as our rare birds may be encouraged to remain with us.

Another danger to wild flowers, more than once referred to in these pages, arises from the extension of golf. Here is what Mr. Crawford has to say on this subject, so far as it affects the "beauty of sea-coast stretches known in their natural state as links."

"No pleasanter way can there be of spending the hot hours of a summer day than on some royal mantle of purple thyme, or some humbler couch of yellow bedstraw, looking away over the lit and shaded grasses, and yielding to the drowsy influence to tilt the cap over the face and to go to sleep to the whispering of the sea within the shell of the ear.

"Of seaside thyme, or humbler hedstraw, there will soon be none. As these scenes are being invaded and returfed, this sketch may come to be interesting as a picture of what used to be.

"In St. Andrews—the Mecca of golf—until the other day a margin of natural beauty was left between the new course and the sea. Visitors will recall the bright picture on the sunny afternoons of their stay, filled in by attractive groups of which they may have formed one.

"Even this strip has been taken away. And a whisper is passing round that the lack of walking-room may be supplied by wounding the sides of perhaps the most picturesque sand-dunes in the country. This would be worse even than driving away the link flowers, and denying an afternoon *siesta* in the hot sun to all who are not prepared for a rude awakening."

We have left ourselves no space to give an example of Mr. Crawford's treatment of the wild flowers which form the main subject of his book, but this will afford an additional reason why our readers should obtain it for themselves. They will not regret the purchase.

We have already referred (see p. 75) to the extremely cheap re-issue (in 6d. parts) of Messrs. Cassell's *Familiar Wild Flowers*, but should like again to call attention to this very useful work. Even more satisfactory than the coloured plates, to our taste, are the representations of the plants which decorate the initial and end of each description. The letter-press might, we think, be better, but it is at least free from inaccuracies, and this is not always the case in "popular" books.

SELBORNIANA.

Mowing Machines.—These implements are often most cruelly destructive to animal life. I saw a very sad sight a week or so ago—that of a young pheasant just in the act of hatching her brood when the machine cut off one leg, killed all the young birds and broke the remainder of the eggs. The hen bird flew a few yards and died from the effects. A short distance away in the same field a hen partridge was killed on her nest and the eggs destroyed. A red-legged or French partridge was sitting near but out of the way of the machine, and this beautiful bird took off her brood. A stoat near having a litter of young had not interfered with this bird, but near the haunt was a young partridge and a young rabbit partly eaten. Rabbits are often cut to pieces with mowing machines.

J. Hiam.

The Closing of Footpaths.—There are at least two sides to every question, even to the closing of footpaths. I send an extract from a letter which I have lately received from a lady who is very fond of the country, and who is at present staying in Yorkshire. All that can be said is, that it behoves all Selbornians, by precept and example, to discourage conduct which is not only disgraceful in itself, but, wherever it was common, would go far to justify acts on the part of land-owners which are liable to interfere with the enjoyment of innocent people and to be described as wantonly oppressive, whereas they may be almost necessary acts of self-defence. It is no use attempting to conceal the whole truth about these matters—in fact, Selbornians would simply be injuring their own cause by attempting to do so.

W. F. Kirby.

"Tourists are very thoughtless people; the dalesmen do not approve of them—so many leave gates open, and cattle and sheep wander and go into fields where they ought not. Such people little imagine the trouble and expense they wantonly cause farmers. On Saturday a farmer civilly asked two ladies (?) kindly to shut gates after them. *They left every one open!* His sheep strayed, a field was damaged, and he had to go a long way over the fell to seek his sheep, which were mixed with some others. Such conduct is very shameful."

The Sparrow.—Those interested in the sparrow question will do well to apply to Miss Ormerod, Torrington House, St. Albans, enclosing a penny stamp for a pamphlet she has lately written upon the subject. We purposely refrain from expressing any opinion on the matter, as we cannot open our pages to a discussion on the sparrow; but Miss Ormerod's statement of the position undoubtedly deserves attention.

Wanton Destruction of Natural Beauty.—"The church and burial ground of St. Mary's, Stoke Newington, date back to the seventeenth century, and the trees which almost concealed the old church from the adjoining highway of Church Street have for years been the pride and admiration of the older inhabitants of the parish. There is a clock in the church tower, and at a recent parish meeting the rector was asked to have the ancient trees lopped, so that passers-by could see the time. The rector (the Rev. Prebendary Shelford) declined to accede to the request. Last week during the absence of the rector at the funeral of the Bishop of Wakefield, a number of roadmen in the employ of the vestry took possession of the burial ground and lopped the trees in a most astonishing fashion. The matter came before the vestry late on Tuesday night, when Mr. J. J. Runtz, J.P. (the vicar's churchwarden), asked by whose authority the work of "destruction" had been carried out. The trees, he said, had been hacked in such a manner that they could not possibly recover their pristine beauty during the lifetime of any of the members present. The magnificent row of limes at the entrance to Clissold Park were now unrecognisable. Prebendary Shelford (the rector) said it was not by his authority that the trees had been cut. He believed that a distinctly illegal act had been done, but no amount of damages could compensate for the loss of beauty to the district. The matter was referred to a committee for further inquiry."—*Daily Chronicle.*

NATURAL HISTORY NOTES AND QUERIES.

Young Cuckoo.—I have to-day (July 10) seen a young cuckoo being fed by a "dishwasher"—it is fairly strong on the wing. Are they staying late this sunny summer, or is this a solitary specimen? Query—will it live to join its parents in warmer climes?

Liphook. G. WARREN.

Cat and Water.—A friend of mine has a young cat who is very fond of water, putting its paws into it, and, should it be running water, trying to catch it. Any one wishing to bring the cat to a particular room has only to let it hear the sound of water and it will immediately come. It is a great pet, and accustomed always to attend afternoon tea in the drawing room; but should it wish to come up stairs at any other time, it slips up quite quietly, that a little bell it wears round its neck may not be heard, and then scratches at the door; but at tea time it rushes up ringing its bell loudly. It is a beautifully-marked little cat, grey, with black rings round its body, legs and tail, and small ears. It bears the name of "Rob Roy."

C. E. GORDON.

Squirrel and Eggs.—While walking in a copse in Surrey in the month of May, my attention was drawn to a certain clump of elder bushes from which loud cries were proceeding. Thinking that the birds were resenting my intrusion, I crept closer, when within a few feet of them I espied a squirrel sitting on a branch, near which was a nest. The animal had an egg between its fore-paws which it was sucking. On seeing me it scampered off, much to the relief of the birds. I found another broken egg on the ground and there were two in the nest, which I took thinking they might likewise fall a prey to the squirrel. They were the eggs of the garden warbler. I was gratified to find the nest a fortnight later in a more secure spot and the eggs were hard sat, so I trust that the parent birds were enabled to rear their brood in safety.

Fylton Rectory, Bristol. A. C. MACKIE

TO CORRESPONDENTS.

S. L. P.—Received with thanks.

C. T.—We are glad you were pleased; we do our best to steer a middle course.

T. F. B.—Please read Rule 4.

H. J. S. B. C.—We do not know the book.

Sigma.—We have submitted your nests to Dr. Sharpe, who says, "The man who takes a nest and does not see the bird, should not take the nest at all. It is absolutely impossible to name such fragmentary nests."

RULES FOR CONTRIBUTORS AND CORRESPONDENTS.

1. All communications for NATURE NOTES must be authenticated with name and address, not necessarily for publication.

2. The return of unaccepted contributions cannot be guaranteed. We cannot undertake to name specimens privately, or to return them.

3. All communications for the September number must be in the Editor's hands by the 10th of August.

4. Communications for NATURE NOTES should be addressed to the Editor, JAMES BRITTEN, F.L.S., 126, Kennington Park Road, London, S.E., as should specimens for naming, books for review, &c. The Editor cannot undertake to reply privately to questions.

5. Letters connected with the Selborne Society, as well as all inquiries as to the supply of NATURE NOTES, and subscriptions, should be addressed to the Secretary of the Selborne Society, A. J. WESTERN, Esq., 20, Hanover Square, W.

6. The Editor is not responsible for the contents of the last page of each number; communications respecting that page must be addressed to Mr. WESTERN, as above.

SELBORNE SOCIETY NOTICES.

Towards Reduction of the Deficit a Vice-President has promised a donation of £5, and asks that twenty more will do the same, in order that the Society may pay off its indebtedness and commence afresh with a working balance. It is earnestly hoped that others will contribute in the same way. An immediate response would be greatly valued.

Special Appeal.—In connection with the Appeal in last month's NATURE NOTES, the following donations have been received, and are hereby acknowledged, with the best thanks of the Council :—G. F. Rowe, Esq., 18s. 6d. ; Mrs. A. E. F. Barlow, £1 1s. ; Miss L. Marshall, £1.

Field Club Saturday Rambles :—

September 4.—Over the Addington Hills. Meet at Elmers End Station at 2.58; Cannon Street, 2.18; London Bridge (S.E.R.), 2.21. Tea at Sandrock Hotel, Shirley, about 5. After tea walk over the Hills to Coombe Lane. Take single tickets to Elmers End. Guide, Mr. E. A. Martin.

September 11.—Visit to Kew Gardens. Waterloo, 2.30; Clapham Junction, 2.40; Kew Bridge Station, 2.57. Meet at main entrance to Gardens on Kew Green, 3.15.

September 18.—Leave Woodside Park Station (G.N.R.) on arrival of train leaving Moorgate Street at 2.50; King's Cross, 3.2; Finsbury Park, 3.12. Thence by Totteridge Common to Mill Hill. Tea at "Adam and Eve," Mill Hill. Return from Mill Hill Station. Guide, Mr. Carpenter.

September 25.—Leave Chingford Station on arrival of 2.34 train from Liverpool Street; Clapton, 2.45. Thence *via* High Beach to Foresters' Inn, where tea at 6 p.m. Day tickets, Liverpool Street, 1s., Clapton, 8d. Liverpool Street tickets are available for return from Loughton ; on tickets from Clapton there is a small excess charge. Guide, Mr. Marshman Wattson.

October 2.—Croham Hurst and Sanderstead. Take return tickets to East Croydon. Victoria, 2.35; Thornton Heath, 2.55; London Bridge, 2.25 (L.B. & S.C.R.). Walk to Ballards Wood, and Croham Hurst, where tea. After tea to Sanderstead, where take train at 7.34.

A Bibliography of Gilbert White, the Natural Historian and Antiquarian of Selborne, by Edward A. Martin, F.G.S., can now be had on application to the Hon. Secretary. The Roxburghe Press, 1897, 8vo, pp. xiii., 274. Price 3s. 6d. Published under the auspices of the Society.

Council and Committee Meetings :—

The next meetings of the Council will be held on Tuesdays, September 7, and October 5, at 5.30 ; of the Magazine and Leaflet Committee on September 21 and October 19, at 5.30 ; and of the Finance Committee on September 21 and October 19, at 6.15.

Badges designed by Mr. John Fullwood. Prices : Brooch, 3s. ; solitaire, 1s. 9d. ; pin, 1s. 6d. ; pendant, 1s. 6d. These are especially useful as a means of identification between Selbornians when taking their holidays, or at country Field Club Rambles.

Price of Selborne Society's Leaflets.—Members are requested to note that the price in future of single-page leaflets will be 1s. per 100, post free.

Leaflets.—"The Cruelty of Wearing Osprcys," by Mrs. Lichfield; "Feathered Women," a letter by W. H. Hudson, which appeared in the *Times* of October 17th, 1893, and was reprinted in NATURE NOTES of November, 1893; "To Boys and Girls;" "The Destruction of Hawks and Owls," by John Cordeaux; "The New Wild Birds' Protection Act," by H. D. Rawnsley; "How to Start a Branch of the Selborne Society," "A Plea for the British Butterfly," by W. F. Kirby.

EDWARD A. MARTIN, F.G.S.,
Hon. Sec. Magazine and Leaflet Committee.

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AUTUMN.

THE late Autumn,—when the fields have been shorn of their golden burdens, and when the orchards are no longer bowed down with a weight of rosy apples and russet pears,—is generally looked upon as a rather dreary and cheerless time. A reason for this may perhaps be found in the fact that Nature at this season seems to tell very plainly, to all who care to listen to her, of the cold, dead winter months which must pass, ere we can once again expect to welcome the budding leaves and blossoms of springtime.

Yet, as the Psalmist observed, so many years ago, "day unto day uttereth speech, and night unto night showeth knowledge;" and surely this season speaks as loudly as any of the others, telling us anew that wonderful, never-ending story of life, decay and death, and leading our minds to look onward to the time when, out of this very decay and death, new and vigorous life will arise.

To one who loves Nature, a walk in the country is always fraught with deepest pleasure and interest, no matter what the season. Away in the fields, the lanes and the woodlands, there is so much to see, and learn, and meditate upon; so much to wake up in the heart that indescribable feeling—a feeling partaking alike of worship, wonder and delight, known only to the true Naturalist.

At this season the trees are gorgeous in their display of lovely colours, and will remain so until the first sharp frosts scatter the leaves on the ground below. The foliage of the chestnut turns to a beautiful golden yellow. Under the trees, amongst the grass, lie the polished "conquerors;" it is always a pleasure to look at them, and the desire to pick them up and

take them home is almost irresistible. The elms frequently grow yellow branch by branch,—one often sees one golden branch, whilst all the others on the tree are still green. The ash is amongst the latest trees to burst into leaf in the spring, and is one of the earliest to shed them in the autumn. The leaves fall green. The beech is none the less glorious in its autumnal garb than at other times in the year. Its rich orange is very striking, especially in woods, where many grow together. The mast forms an attraction for the squirrels and dormice.

These little creatures are very busy, adding to their already large stores of nuts and fruits, for winter use. Their appetites increase, too, at this time of the year. They put on fat fast, and grow beautiful coats of fur, to keep them warm during their long hibernation. Squirrels eat largely of fungi, which abound in the woods now, and their teeth-marks can often be seen on them. Where the woods come down to the stubble fields, the pheasants will go to pick up any stray grains which they can find. They keep out until dusk, but return at sundown to their accustomed roosting places.

In the lanes they frequently rise as you approach, with much flapping of wings, and fly off with rather a heavy flight, sometimes rising high over the tops of the trees. They spread their tail when they rise like a huge fan. Rabbits hop leisurely across the path by dozens, in the evening, on their way to their feeding rounds in the meadows below. Their white tails can be made out when it is too dusk to see them, themselves.

The wood-pigeons are in the fields all day now; they grow fat on the farmer's turnips, but their flesh is not improved for eating by this. In the evening they return to the trees; they are very watchful, and rise at the approach of a stranger with much commotion, breaking off the little twigs with their wings.

There still remain some late blackberries, ripe, and ready to drop. The brambles are a pretty sight, with their red, green and yellow leaves, and black fruit. Here some wasps still resort, they eat their way quite into the berries, as fair gatherers sometimes find to their cost. But they are getting clumsy and drowsy, and are no longer the fierce busy insects of the early summer. Then they were continually passing to and fro between the hole in the bank and the rotten posts in the fence, carrying bundles of wood fibre for the construction of their nests; now at times they hardly seem able to fly at all, and will soon die, as countless thousands of wasps have done at the approach of winter for thousands of years past.

So we will not kill them before their time nor grumble at them for taking their share of the fruit, and if we do not molest them we shall find that they have far too much to do to go out of their way to annoy us, and by helping to destroy some of the many flies which swarm in our houses in the summer, they will repay us for our good will.

Butterflies are scarce now. A few Brimstones and Tortoise-

shells, Whites, and here and there a torn Peacock or Red Admiral, make up the list. Still even these help to make the lanes and fields look cheerful.

In the woods, the high thickets of bracken which have throughout the summer delighted our senses by their elegance, and by the clean, fresh, country smell which they exhale, are turning to all shades of yellow and brown. They will remain standing, dry and dead long into the winter, and form excellent shelter for the game.

Looking at the ferns, we are all at once conscious of a slight noise amongst the dead leaves on the ground; turning the head we see a weasel dragging along some small animal. At sight of us it leaves its prey, and makes for a hole in the bank, on the other side of the path. The prey, on examination, proves to be a short-tailed field-vole, warm and bleeding. Poor little thing! One always experiences an involuntary feeling of pity at the sight of a helpless creature, wounded or dead.

On reflection, however, we come to the conclusion that the weasel has as much right to live as any other creature. He and the vole are equally destructive, each in their own way; so let us place the field-mouse where we found it, retire a pace or so, and keep still. Twenty seconds have hardly passed standing thus, when an anxious little brown face appears at the hole in the bank, and looks cautiously round. The owner of the face sees us, but deciding, apparently, that the deed must be accomplished now or never, he slips quickly out of the hole, across the path, and grasping the field-mouse he hurries back to security—and dinner.

The swallows grow daily more and more uneasy, and congregate morning and evening on the roofs of the houses. Soon they will leave us, and take their way to the warm sunny shores of Africa. One cannot watch these charming birds thus, without giving a passing thought to the memory of White, of Selborne. He never seemed to be quite able to satisfy himself that at least some of the *Hirundines* did not hibernate in this country; and, as all those who love his letters know, he constantly returns, in them, to this subject.

Nature holds out, to all who will take it, a joy which no man can take away. Her ways, though usually slow, are so sure and certain and so unchangeable, that to meditate thereon fills the mind with a restful peace and confidence.

ALFRED H. BASTIN.

Reading.

CROWBOROUGH BEACON.

IT has happened that during the great heat of this Jubilee year I needed to retreat to some spot where I might find quiet and a measure of coolness, whilst painters invaded my home.

Years ago I heard that Crowborough in Sussex possessed certain charms in the way of exquisite scenery, the finest possible air, and nearness to a great forest. These attractions led me to settle there for the month of August, and possibly it may be of interest to some of our members to learn a little about a part of the country where they may certainly enjoy a health-giving air and lovely scenery. It will be observed that I do not mention Crowborough's possession of a "forest," for that has been my great disappointment. I had cherished the hope that I might steal out very early some fine morning, soon after sunrise, and make my way into Ashdown Forest, there in leafy glades to see nature awakening into life, hear the first songs of the birds and enjoy some hours of quiet but intense happiness in the companionship of nature. Alas for my romantic anticipations! the forest now exists only in name.

"The great forest of Anderida," so the guide-book says, "ran through the whole of the northern part of Sussex, taking up nearly one half of the county. It extended from Kent through the whole weald of Sussex into Hampshire, and is said to have been one hundred and twenty miles in length." Such a forest would indeed have satisfied my desires. I was still buoyed with hope that some portions of it existed when I heard visitors remarking to each other that they had been through the "forest" for their walks and drives; but after some days I discovered that the wild, heathery moorland still goes by the name of a forest although scarcely any trees but low growing Scotch firs now exist upon it.

Abundance of ironstone is found throughout this region, and the smelting works which were in operation long ago appear to have led to the destruction of the timber to supply fuel for the furnaces. A law passed by Henry VIII. in 1543, with reference to these Sussex woods, though of course utilitarian in intention, is I think quite in accord with our Selbornian principles. The king ordered that "in cutting a coppice wood of twenty-four years' growth or under, a certain number of trees should be left standing and unfelled for every acre."

Crowborough is built upon a plateau over eight hundred feet above the level of the sea, so that one breathes an air which is most exhilarating and delicious; it would have delighted the good old divine, Thomas Fuller, who tells us to "Choose good air, for air is a dish one feeds upon every minute and therefore it need be good." The elevated position of this place enables one to see across ranges of purple hills on all sides, and one never tires of watching the cloud shadows flitting across the far-reaching landscape.

The Brighton Downs form the boundary of the view towards the south, and on clear days and moonlight nights it is said that one can discern the sea in the direction of Pevensey Bay, and even the ships can be clearly seen with the aid of a telescope.

The wide stretches of moorland covered with ling and heather, the young Scotch firs forming glades of welcome shadow here and there, the keen fresh breezes all suggest that one must be on a Scottish mountain rather than an English hillside, at any rate the invigorating effect is the same, and one is led on and on without knowing fatigue.

At this season, after long drought the sandy soil is rather painfully arid and but few wild plants are to be found in flower. Asphodel must have been abundant in summer, for in marshy places its red brown seed vessels give a rich tone to the reedy grass. *Drosera rotundifolia* grows on the open parts of the moor, and more rarely the marsh gentian is also found. I am told that in spring the hedges and banks abound with primroses, bluebells, and anemones, and the copses are yellow with wild daffodils.

I could not be in this neighbourhood without making a pilgrimage to the cottage known as "Downs," where in 1885-6 Richard Jefferies wrote some of his most fascinating essays, those contained in *Field and Hedgerow*. The square stone-built cottage is not by any means picturesque, having simply a door in the middle, a window on each side, and three windows above. The furze hedge which used to exist in front has been replaced by a low stone wall which encloses a small garden round the house. It is touching to think of "The Hours of Spring" having been written in that lowly room facing the road, the last lines ever penned by his own hand* being so full of sadness, his spirit pining to be able to watch the signs of coming spring, but only "through the window-pane could he see the lark high up against the grey cloud and hear his song."

There was no photograph to be obtained of the cottage, and it was only after several inquiries that I could discover where it was; so much for local fame.

During the month I have spent here I have seen but few kinds of birds, and no rare species, some rich coloured sulphur butterflies and an abundance of the commonest blue butterfly flitting over the heathery ground. They rest at night on slender grass stems with their heads downwards, and the wings so closely folded that no azure colour can be seen. I thought at first that they were grey flowers so numerous were they in one special field. They show a wise instinct in choosing their resting place, for even after a night of stormy wind and rain I found them next morning waving to and fro in their aerial cradles quite unharmed, while such fragile creatures amongst tree leafage would be certain to meet with injury and death.

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* The later essays were dictated.

I shall long remember my pleasant weeks in this health-giving place, the endless drives along the sandy lanes purple with heather and ling, the far-reaching blue distances, the woodlands here and there with young Scotch firs growing up to replace the old forest and, above all, the pure sweet air which one feels must bring renewed vigour to one's brain and a greater enjoyment of life for months to come.

ELIZA BRIGHTWEN.

RAILWAY EMBANKMENTS.

ALTHOUGH our railways have done much to spoil the scenery of many a hitherto picturesque neighbourhood, yet it cannot be denied—even by naturalists—that they have brought with them many advantages also. The banks—laying aside the convenience which the railway affords of getting out speedily and comfortably into the country—prove a welcome retreat to many of our feathered friends. Along most railways there is either a bank stretching downwards on both sides from the rails, or else the rails are in a valley, and the banks run up from them to the more level country. The former of these is in my opinion the most frequented by birds and small animals. The former appear to be little frightened by the passing trains, and only those nearest to the rails think it worth while to fly lower down the bank. The birds that are most frequently to be noticed are the tree and meadow pipits, for whom no more suitable place could be found to hide their nests in than the rank herbage which grows on the banks. Again, yellow hammers, buntings and wagtails are always well in evidence as they fly a little above the rank grass for some distance, and then with a satisfied twitter settle again to resume their search for the grass reeds which everywhere abound. Another bird which may be said to be decidedly partial to the railway embankment is the kestrel hawk, which takes advantage of the loud noise of the train to pounce on its prey, and may frequently be seen hovering over the line, ready to snap up any bird which is induced to seek safety from the advancing train in flight. This propensity of the windhover has, alas! been frequently the ruin of this beautiful bird as, in its eagerness to snatch some bird which is flying across the line, it is caught by the approaching engine and dashed to pieces. Frequent instances of this have occurred quite recently—the birds often getting fixed in some portion of the engine and secured by the driver. In this way a beautiful specimen of the golden eagle was captured in Scotland a few years ago. The telegraph wires which run along the sides of the embankment are much used by the butcher bird and fly-catcher, from which point of vantage they are enabled to secure the flies and beetles which are in the air.

We must not omit to mention the many swallows and martins who make the wires their rendezvous previous to their departure to warmer climes. Turning once more to the embankment we find that it is freely patronised by partridges, many covies of which I have flushed during my walks along the banks, but these, I am sorry to say, disappear after September is past, doubtless scared by the many sportsmen who frequent these parts. Near Reading there are several ponds at the foot of the embankment, clothed with reeds and bull-rushes, and in these I have frequently noticed moorhens and other aquatic birds, apparently uninfluenced by the "iron horse."

If we leave the birds and look for other objects to interest us, we shall be by no means disappointed, for the many flowers which bloom on the sides are much frequented by butterflies and day-flying moths. I remember that a few years ago I counted more than thirty clouded yellows as I was walking along, besides many other species, such as the beautiful peacock butterfly, which seems to be aware of its splendour as it toys on some flower more sombre than itself. The blues—both the common and silver studded, and occasionally the azure, are to be found as they flit past and settle on the very flowers which one is just about to tread upon. Here also may be seen the painted lady, tortoiseshell, the two heaths and the dainty little orange tip. Perchance you may come to a stone bridge under which cattle are standing, hidden from the fierce blaze of the sun. On the gate which leads to this archway is sure to be a wall butterfly, or, as it is sometimes called, the "gate keeper," which is gently opening and closing its chequered wings, and seems to be almost inseparable from the surroundings.

The mice—both long and short tailed—find a veritable Paradise in the concealment afforded by the long grass and coarse herbage. Here they have the moss and fine hay which constitute their home ready at hand, and the abundance of the little round balls of finely chopped hay which meet one's eyes amply testify to the number of these interesting little rodents, although no doubt many of these animals fall a prey to the kestrel by day, and to the owl and snake by night, as the former's pellets indicate. Before closing we must not omit to mention the numerous wild bees which nest on the embankment—frequently using the deserted nests of mice, pipits and other birds—wherein to deposit their small shapeless lumps of cells, some stored with honey, others with the young grubs. In fact there is an exceedingly varied list of birds and animals and insects which are ever to be found, and which may afford an endless source of amusement and instruction.

We owe a deep debt of gratitude to the railways for affording such a welcome abiding-place not only for birds, but also for flowers and insects. The reasons for this being the case I put down to two facts: firstly, the grass is allowed to grow ripe and the seeds to fall before it is cut, and therefore the seed-eating

birds are enabled to rear their young in safety and to find sufficient food near at hand for them after they are fledged; secondly, the embankment is little trespassed on, either by bird catchers or other individuals, owing to the frequent passing of trains and to the vigilance of the railway officials, and thus both birds and animals, as well as insects, are permitted to remain in quiet possession of the situation.

Fylton Rectory, Gloucester. A. C. MACKIE.

CORRUGATED IRON:

ANOTHER ASPECT OF THE QUESTION.

MR. ROPE'S interesting article on this subject (p. 112) breathes throughout the spirit of a nature lover and a searcher after the picturesque: and as far as mere sentiment goes I am at one with him. There is, however, another side to the picture. Corrugated iron is without doubt a "hideous staring abomination." I know a charming old world spot which from a boy I have loved for its beauty. There were the stately trees which for many a generation had given each season an added charm to the scene. There too, surrounding one of the large home meadows, was the fence of rough posts and rails; the meadow rich in buttercups and daisies, tenanted by grazing cows, some feeding, others chewing the cud of contentment and peace, a few quenching their thirst at the pond in the bottom. Above the meadow a high brick wall of harmonious tints—the rich deep red of age enlivened with lichen and mosses, pellitory-of-the-wall, greater celandine, vine-leaved saxifrage, and wall pennywort: a rich toned picture in a glorious setting. Behind the wall an old world garden, terminating in the courtyard of a sixteenth century manor house, every part of it mellow with age. Away to the left a vast old barn, timber built, with a lavish display of mighty beams and rough roof work of multitudinous intricacy. The whole scene could be taken in at once from the upland orchard to the right —just that "sweet homely character" beloved by Mr. Rope, the writer, and hundreds of others. Such had been the picture, such the calm repose of that spot for many a rolling year. Such is it no longer.

Gone are the monarch oaks and elms: vanished "the rough post and rail fence." There is still the old wall ruddy in the sunlight. There too, the old garden and the ancient house silent and lethargic in decay, while wood pigeons preen upon its shingle roof and coo a requiem for the days that have been.

But there is a worse sight yet to the lover of the beautiful than the loss of the giant guardians of the meads, or the "harsh,

rigid, and assertive lines" of the iron fencing which has taken the place of the wooden one. The old barn is gone, and in its place is a "hideous staring abomination" of corrugated iron. There it is gleaming in the sunshine, cold, deadly, cruel. A strong wish is present to turn from it, to rest the eye on the green fields, on the waving corn, or even away there to the sky-line, where upon the ridge of the breezy plain the old shepherd in his white smock and crook in hand tends and watches his vast family of sheep and lambs. But no, that corrugated iron structure is a basilisk in its fascination, the eye cannot move from its venomous gleam.

Now all this is very sad and much to be deplored from an artistic point of view. It is very jarring to the nerves of those who love the country as they knew it in their youth. But, in most cases, there is a reason for these changes which, in all fairness to landowners and country gentlemen, should be placed side by side with Mr. Rope's plaint. The front of the offending lies *not* in the "mercenary age," or the desire for "cheapness," but, alas! in the hard times which have fallen upon the landowners. With rents reduced again and again and even then badly paid, with hundreds of acres unlet, and yet tithes on them to be paid just the same, can it be expected that owners of old country properties shall study the artistic and the beautiful, by keeping all their timber standing, and spending hundreds of pounds in patching up old places which no sooner patched have to be repaired again? Timber fences constantly decay, are the sport of tempests, and the gymnasium of the village youth. Iron and wire is lasting, does not oppose such resistance to gales, is not adapted to bucolic gymnastics. Therefore, the man of lessened income repairs his rotten wood with these.

Picturesque barns and outbuildings have after years of costly outlay in patching become at last past repairing. What is to be done? The timber that might have built others has been felled to meet many a pressing need, or that yet standing is protected by law. Something must be put up; let it be of moderate cost, and the most lasting and weather resisting. Then comes the corrugated iron, which, as Mr. Rope points out, loves not lichen, and moss and flower. Every one knows that when we see moss and flowers flourishing on walls or buildings, there too is decay of material, and sooner or later must be repairs with their heavy outlay. Therefore, in nine cases out of ten *against* his artistic feelings, the owner erects the enemy.

Then a word may be said about the "picturesque cottages." Very pretty indeed are these—the thick thatch, the little windows almost hidden in a profusion of creeper and roses. But what of the inside? Rooms dark and stuffy, floors either of dark cold stone, or mud; sleeping accommodation often lacking in decency. These "sweetly pretty cottages" are mostly very old, and built

in the days when, though the country was perhaps more beautiful, less thought was taken for the humble sons of toil, for their health, morals and comfort. As these "whited sepulchres," as they often are, get past patching, a greater love than even that of the picturesque, the love for their fellow-men, causes owners to build cottages less pleasing to the eye, but light, and roomy, and dry. Thatch is banished, for it is a harbour for vermin, and mouldering odours; the beloved of the fire fiend, and the abhorrence of the insurance office.

Yet in many of our villages is the picturesque still to be found if we like ruins. Cottages in every state of decay, roofs off, windows out, doorless and floorless, nettles everywhere. "What a disgrace, what a shame!" exclaims the stranger; "what is the owner about that he lets his property get into this state?"

The owner is probably adding to his miserably diminished rent roll by active work in the profession or art for which a liberal education has fitted him. Yet even had he the means to re-construct these ruins, it is a fact that there is no one to occupy them. The population has decreased and is decreasing. The farmer cannot get hands enough for his needs. The towns and cities have swallowed up hundreds of the population.

For the vandal and philistine in these changes, the man who *can* but *won't*, there can be no manner of sympathy; but for the country gentleman who is himself a lover of nature and a student of White, Jefferies and Thoreau, there must be much. No one can deplore, more than he, amid the corrugated iron, the wire, and the tree stumps, the things in his case called into being by the "res angusta domi."

CHARLES F. W. T. WILLIAMS.

FACTS AND FABLES OF THE GOATSUCKER.

ON account of its nocturnal habits and extraordinary appearance, the goatsucker has become an object of suspicion, if not terror, to many who surround it with mystery and fable. In reality it is the most harmless of birds, and instead of causing trouble is of much use in helping to rid the country of many insect pests. It is our one representative of a large family widely distributed over the world, and is a most interesting bird, differing in form, cry, and habits from all others. From May to September or October, they may be found scattered all over the British Islands, the principal colours of the plumage being shades of brown and grey; the silent flight and general appearance when on the wing causing them to resemble an owl more than any other bird.

In the day time they crouch on the ground amongst the

bracken, heather, and furze bushes of our commons, or seek the shelter of some thick tree, where, sitting motionless, and *parallel* with the branch, their dull colour renders them almost invisible. As soon as evening approaches, and the dusk begins to gather, the goatsuckers issue forth, and uttering their curious vibrating cry, dart backwards and forwards, falling and rising in the air, in search of moths and other nocturnal insects. The mouth, which is most unusually large, is kept wide open while the bird is hunting, acting like an animated butterfly net, and sweeping up all that it comes in contact with, added to which the inside of the beak secretes a sticky fluid which, with the stiff bristles surrounding it, tend to make escape from this formidable trap a matter of some difficulty; and to further aid the bird in retaining its prey, it has in addition to the above-mentioned another peculiarity, namely, that the middle toe is finished off with a saw-like claw, a very efficient help when holding on to a captured victim. There is a goatsucker which abounds in the Maremme of Patria which is most remarkable, having "the exact representation of a white moth depicted on each side of the expanded tail of the bird; so that when flying about in the night the moths, which constitute its principal food, seeing the moths upon the tail, come fluttering round their devourer instead of avoiding him."* Owing to its popularity it has acquired many names, most of which refer to the cry, the commonest being puckridge, wheelbird, goatsucker, night-jar, night-churn, churn-owl, fern-owl, eve-jar, and spinnie. These birds make no nest, but deposit their two long mottled eggs in a hollow in the ground, the parents being said to feign injury and inability of flight in order to decoy away enemies, or even to move the eggs to a place of greater safety should danger threaten them. In Hampshire these eggs are about the only kind left unmolested by village boys, who say they should never be blown, or even touched, as they are very poisonous—an evil attribute supposed to be also shared by the birds themselves, who are said to fly at the eyes of any one disturbing their young, and to certainly poison the offender should they succeed in drawing blood. Also, say the same rustics, puckridges fly round and round in the air trying to hit passers-by on the head with their wings, and that should they so manage to touch a child or young person, he or she will never grow again; if instead 'tis a calf they come in contact with, the animal will surely die. One old man near the village of Haslemere was heard to say last summer that to his thinkin' "t' puckridge is a sort o' hawk 'at maakes a cry most like door-latch rattlin' up an' down, an' when it flies from tree to tree in a hevenin', an' makes a great noise, folks *do* say as how 'tis a sign of hot, fine weather—but," added the old fellow in conclusion, "he be a hill-meanin' bod, he be that!"

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* *Memoirs of Life and Adventures of Col. Maceroni*, p. 469.

In some places goatsuckers are said to be the souls of unchristened babies wandering around their earthly homes, which idea is strengthened by the fact that year after year, like the swallows, they return to the same neighbourhood and nightly frequent their old haunts. Also, as their most common name implies, they are credited with being able to suck the milk from goats turned out to pasture on the common lands. This latter idea is of great antiquity. Pliny writing of them says :* "The caprimulgi (so called of milking goats) are like the bigger kind of owsels. They bee night-theeves, for all day long they see not. Their manner is to come into the sheepe-heards' coats and goat-pens, and to the goats' udders presently they goe and suck the milke at their teats. And looke what udder is so milked, it giveth no more milke, but misliketh and falleth away afterwards, and the goats become blind withall." So we see that from time immemorial to our present enlightened day a harmless bird has been vested with unnatural powers, a fallacy which all our modern education and science has as yet failed to entirely eradicate.

W. M. E. F.

FOR YOUNG SELBORNIANS.

WE are sometimes asked to recommend books suitable to young Selbornians, books which are at once good and cheap, and therefore suitable for general distribution. Our readers will have observed that we devote considerable space to reviews of new books, to recommending good ones and condemning bad ones; and we have reason to know that this is considered by many among the most useful functions of NATURE NOTES. The establishment of lending libraries, of Selbornian literature in schools, or the introduction of this into existing libraries, is, we are convinced, a very important branch of our work, and those who wish to promote it will find ample material for so doing recommended in these pages. There is no lack of suitable literature; the only thing we need do is to place it within reach of those to whom it will be beneficial.

But besides the work of supplying libraries, there are other means of bringing literature into the hands of our children, and Mr. Stead, in his "Books for the Bairns" has provided us with two publications, which from their attractiveness and cheapness deserve to be distributed broadcast. They are especially suitable to the very young, to whom the pleasure of possessing a book of their own is still real and fresh. Simple in style, crammed with pictures, and costing only a penny each, they may be distributed

* *Plinie's Naturall Historie*, Part I., p. 292.

at Selbornian meetings, or, for that matter, may be sold there, for most children can now and then find a penny to spend, and they are not likely to find a better investment.

One of these books contains an old friend, *Eyes and no Eyes*, and the story of *The Three Giants*, Ventosus, Aquafluens, and Vaporifer, who introduced an element of interest into the school reading-books of forty years ago, when such works were very different from the delightful volumes which now entice the pupil along the path of learning. *Eyes and no Eyes*, which was first published in *Evenings at Home* a great many years since, has more than once been recommended to us for reproduction in these pages. Children of many generations have read with interest, and some at least with profit, the account of the walk which Robert and William took one fine holiday. If we assume that two schoolboys would go for a walk alone, and that one was abnormally observant and the other phenomenally blind, there is nothing improbable in the narration: for the objects which so interested William are such as may be met with on an ordinary country walk. William could not resist the instinct which prompted him to capture a dragonfly, and it must be admitted that he "longed to catch" a kingfisher; but this was before the days of the Selborne Society, and long before Robert would have been able to indulge in the cigarette which, for no very obvious reason, the artist has depicted him as smoking. We are indeed led to suppose by the pictures that Robert's line of enjoyment lay in the direction of fine clothes; his top hat, Eton jacket, walking-stick and gloves, contrast with William's more sensible costume. Anyway, Mr. Brinsley Le Fanu's drawings add considerably to the attractiveness of the simple narrative, and help to enforce the lesson it conveys.

What *Eyes and No Eyes* does for one side of Selbornian teaching, another old friend, *The Story of the Robins*, does for another. It can hardly be said that Mrs. Trimmer's narrative suffers from abridgement, and it certainly gains by the addition of "new pictures on every page." Mr. Stead's preface so well describes the teaching of the little book, and the effect it may be expected to produce in the minds of thoughtful and sensitive lads, that we cannot do better than print it, almost in full:—

> Many, many years ago, when I was quite a little boy, before I left off petticoats, if I remember aright, my dear father brought home one day *The Story of the Robins*. He had bought it for a penny or two at a second-hand bookstall, I believe, for we were all very poor in those days, and new books were not so cheap as they are to-day. It was a quaint old edition of Mrs. Trimmer's story, with curious woodcuts illustrating the adventures of the Robin Family. What has become of that old brown-paper-covered little chapbook I do not know. But the reading of it, or rather the hearing it, as my father read it aloud to us children nearly half a century since, left a deep mark upon my mind which has influenced all my life. A sense of the hateful cruelty of taking birds' nests, a feeling that nothing was really so horribly wicked as injuring helpless, innocent, loving creatures for one's pleasure, was worked by this story into the very depth of my inmost soul. From that day, the "pulling" of a bird's nest has always seemed to me one of the worst of crimes, an outrage upon the most sacred and the most

pitiful of all mortal things. And when I grew up out of the age when boys take nests, and became a man, the same intense passionate horror remained with me, and whenever selfish men for their own amusement have destroyed homes, or trampled under foot the weak and trusting hearts of those whom they have pretended to love only to betray, it possesses me utterly—just as it used to do when, as a boy, I came upon the shreds of moss or grass that told too well of the nest that had been built with infinite loving care only to be torn away to give a moment's amusement to a selfish lad.

MORE BIRD BOOKS.*

[It is pleasanter to praise than to blame, and we would rather recommend than criticise unfavourably books sent to us for review. But in an editorial capacity our duty is to give a fair account of such volumes as are sent; and the usefulness of our reviews depends wholly upon their honesty. We say this because there are those who seem to think that our duty is either to praise or to keep silence. In this view we cannot concur. When a book is sent to us for notice, it is presumably so sent because the author or publisher is desirous that our opinion of it should be brought before our readers; and we feel bound to act on this assumption. It is manifest that the value of praise would be but slight, were it to be dealt out indiscriminately.—Ed. *N.N.*]

We are at a loss to know what good purpose *The Birds of our Islands* can serve. It aims, we are told in the preface, at being an introduction to the subject. But an introduction so full of downright untruths as this is, can do little but harm to the young student of ornithology. We are sorry to have to say this of a book which is pleasantly written, and has been produced apparently with the best intentions. It is not a systematic account of our birds, but consists of six and twenty chapters on such subjects as "Young Birds," "Spring Feathers," "Hedgerow Nests," "Bird Communities," "Sea Gulls," "Birds of Prey," "Birds of Passage," "Birds and Berries." These chapters should make most attractive reading, and the pity is that the young naturalist must be warned against them. But the author, who has had the advantage of extensive "wanderings in bird-land," has apparently not taken the trouble to read a trustworthy work on British ornithology. It is needless here to review the chapters in detail, and it must suffice to notice some of the statements upon which the above remarks are founded. There are some who doubt the ability of a guillemot to carry its young on its back from the cliffs to the sea; but we believe that no one has previously had the hardihood to say that at night the young bird is shuffled on to its parents' back and taken up to the rocky ledges again! Ptarmigan, we are told, were once plentiful on the heights of Wales and Cumberland! The little auk is said to visit us in winter in a dress of white feathers, only speckled with brown, with leggings of bright yellow! This statement is all the more wonderful because a fairly good figure of the bird in winter dress (upper parts nearly all black) accompanies it. The merganser is said to be clad during winter in a sober brown dress; whereas it is in summer that the male loses its bright colours. And we may add that it is in summer and not in spring that male ducks lose their nuptial plumage. It is misleading to say that many crags and lonely islands round the coast of Scotland and the North of Ireland are the summer homes of the gannet, when its known British breeding haunts are less than a dozen in number. Nor is it correct to say that here and there a pair of great grey shrikes remain to breed with us. The brambling in winter is said to be only known to those who live in the north, and to be rare even in the south of Yorkshire. A reference to a work on the birds of one of our midland or more southern counties would have saved the author from this mistake.

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* *The Birds of our Islands*, by F. A. Fulcher. London: Andrew Melrose. Illustrated, 8vo, pp. 368. Price 3s. 6d.

The Birds of our Country, by H. E. Stewart, B.A.; with illustrations by A. Thorburn, J. Giacomelli, G. E. Lodge, K. Keyl, and R. Kretchmer. London: Digby, Long & Co., 1897. 8vo, pp. viii., 397.

But we have no wish to say more. We are indeed surprised to see in print that old hallucination, that a plentiful crop of hedge berries foretells a hard winter, and *vice versâ*. The experience of the winter of 1896-7 alone should have dispelled this erroneous belief once and for all. The author claims to have discovered a new wagtail which "has no scientific name, for strange to say our leading ornithologists do not seem to know it." It is called here the golden wagtail, and is described as "bright gold above—golden head, golden tail, golden back, gold beneath—from breast to tip of tail pure gold." We can only surmise that the flock of five seen on a roof in the north of the peninsula of Innishowen, were storm-driven wanderers from some unexplored Eldorado.

The book contains a great many illustrations of varied merit, and some of them look as if they might have been used before. They are bad on the whole; some are atrocious, but there are just a few very nice ones. They are, however, not always correctly named. A green woodpecker, with its feathers disordered, does duty for the great spotted woodpecker; a pied (or white, it might be either) wagtail for the grey wagtail; while a peculiarly beautiful illustration of a peregrine falcon, standing on a dead mallard, is labelled "merlin and its prey."

Some years ago, scholastic work took the author of *The Birds of Our Country* to Hampshire, and he justly remarks that no other county in England affords such scope to ornithologists. Forest, downs and sea coast are all comprised within its confines. The object of his book is to give to the young collector a book which will not be beyond his means, and which at the same time will contain an account of all the birds which he is likely to meet with in the British Isles. In compiling the book Mr. Stewart has referred to some of the best authors. "Throughout the work the classification of Seebohm [we may point out that he had several] has been followed, the common birds being taken first; while the rare birds, which have only visited our shores a few times, have been mentioned at the end of each group." This part of the arrangement has not been carried out well. For instance, after treating of the bulk of the *Passeres*, the author groups together a considerable number of species under the heading of "Birds of the family Passeridæ, which rarely, or never, breed here"; and among these we find the fieldfare, redwing, brambling, &c., which are surely "common birds," as well as the marsh warbler, crested tit, siskin and twite, of which it cannot be said that they rarely or never breed in "Great Britain." As to classification, the family, sub-family, and genus is given at the head of the account of each bird in most cases, as well as the generic and specific names. But there are no conspicuous landmarks to show us when we pass from one great division of birds to another, and the young ornithologist reading the book can pass smoothly from cuckoos to doves, and from doves to falcons, without realizing the importance of the mere change in the name of the family, easily overlooked, as the family name are printed in a type less conspicuous than that of the text.

The descriptions of plumage are very slight and inadequate. The snipe, for instance, is described thus: "The colour of the upper portion of the body of this bird is brownish black, whilst the under side is white; the breast and sides are spotted with brown." The illustration of this species comprises two figures, one of which represents the form known as "Sabine's snipe." As not a word is said in the text about their form, the inexperienced ornithologist will probably be puzzled. The author's style is somewhat colloquial, and some passages are not too clear. Take the following, for instance: "The blackbird is one of the first birds to begin building its nest. It is generally easily seen." "We all know the look of the blackbird's egg, and are sure we could distinguish it from any other sort. You may therefore be surprised to learn that sometimes they very much resemble a thrush's."

For the rest, the accounts given of the different birds are pleasing enough, and give evidence of careful observation. Here and there we find some most interesting records—as for instance, of a missel thrush nesting in a disused pigeon-cot, and of a ring ouzel's nest placed in a pear-tree against a kitchen-garden wall in Hampshire.

If we have found fault with the book in some respects, it is because we think it serves its purpose fairly well now, and might serve it better in a future edition. The illustrations are a very motley collection of ancient and modern figures, some of which we have long been familiar with, but never expected to see served up

again. On the whole the figures are bad, and while some are very good, others are as bad as any we have ever seen. When will publishers understand that a bad figure is worse than useless? It is impossible to say what species some of these figures really do represent; but that purporting to portray a peregrine falcon is, if anything, a bad likeness of one of the northern falcons. Curiously enough, precisely the same figure, misnamed in the same way, is used in the work called *The Birds of our Islands*, already noticed. Some other figures are wrongly named, a dotterel does duty for a golden plover, and a pair of gargancy for common teal. These things must have annoyed the author a good deal, for we cannot think that he can have had a voice in the choice of the illustrations.

We have received another instalment* of the excellent publications on economic ornithology issued by the United States Government. The present bulletin contains brief abstracts of the results of good studies of about thirty grain- and insect-eating birds. As the question of the good and harm done by our own birds is occupying a considerable amount of interest at the present time, we think that an abstract of the introduction to this eminently scientific pamphlet will be read with pleasure and profit. It is pointed out that there is a tendency to dwell on the harm rather than the good which birds do. "Whether a bird is injurious or beneficial depends almost entirely upon what it eats, and in the case of species which are unusually abundant, or which depend in part upon the farmers' crops for subsistence, the character of the food often becomes a very practical question. If crows or blackbirds are seen in numbers about cornfields, or if woodpeckers are noticed at work in an orchard, it is not perhaps surprising that they are accused of doing harm. Careful investigation, however, often shows that they are actually destroying noxious insects, and also that even those which do harm at one season may compensate for it by eating noxious species at another." Within certain limits birds feed upon the most accessible food. Thus, as a rule, insectivorous birds eat the insects that are most easily obtained, provided they are not peculiarly disagreeable. It is not probable that a bird habitually passes by one kind of insect to look for another which is more appetising. In order to be positive as to what a bird really eats it is necessary to examine its stomach. When birds are suspected of doing damage a few individuals should be shot and examined to settle the question. The Biological Survey of the Department of Agriculture has been for some years conducting a systematic investigation of the food of species believed to be of economic importance. Thousands of birds' stomachs have been carefully examined, and the results published from time to time. The practical value of birds in controlling insect pests should be more generally recognized. It is easy to exterminate the birds in an orchard or grain field, but extremely difficult to control the insect pests. The value, too, of seed-eating birds as weed destroyers is not appreciated. Weed-seed forms an important item of the winter food of many of these birds, and it is impossible to estimate the immense numbers of noxious weeds which are thus annually destroyed. "Birds are protected by law in many States, but it remains for the agriculturist to see that the laws are faithfully observed"—a remark which we may well take notice of ourselves. The whole report deserves to be carefully studied. Until our Government undertakes some such systematic investigation, the controversy upon the merits of our English birds will go on, though private investigators may form a fairly accurate opinion for themselves.

O. V. Aplin.

* *Some Common Birds in their Relation to Agriculture.* By F. E. L. Beal, B.S., Assistant Ornithologist, Biological Survey. pp. 40, 8vo. Washington: Government Printing Office, 1897.

SELBORNIANA.

The Sparrow.—A correspondent sends us a pamphlet published by the Humanitarian Society in answer to that by Miss Ormerod mentioned in our last. The letter accompanying it is an example of that intemperate advocacy by which well-meaning persons injure the cause they wish to serve.

Our readers will learn with regret of the death of the Rev. Prebendary Gordon, which we see noted just as we are going to press.

The Closing of Footpaths (p. 198).—While admitting that there is much room for improvement in the conduct of tourists of a certain class, which carries devastation more or less in its train, I do not think that genuine ramblers will agree with the remark that the doings of these thoughtless or ignorant visitors should go far to justify a land-owner in closing a public footpath across his fields. On the other hand, it will undoubtedly occur to all interested in the subject, that if every public footpath were rendered accessible by means of a stile, swing-gate, or other contrivance, by which the people might be certain that there was a right-of-way along it, there would be a surprising cessation of the farmer's grievance, that the public, by leaving his gates open, allow his cattle to stray. The farmer's "grievance" is proverbial, and I fear that the loss of this one would be a sad blow to him. The remedy is in his own hands. But it is useless to urge him not to persist in putting up ordinary field-gates instead of renewing the stiles when they have rotted away and left a gap. He will not see that it is entirely his own look out if these gates are left open—especially so in cases where the gate, probably a heavy one, has to be lifted up bodily two or three inches in order to fasten it. And why? I am afraid it is, at any rate in some cases, because the leaving open of gates is often made an excuse for locking them; and more than that, because also in course of time it may so happen that this locking of the gates, coupled with the absence of the stiles, may result in the "alleged right-of-way" being claimed, and possibly secured, as a mere occupation path. It is a process that takes some time in its accomplishment; indeed, it is the sort of thing that may be handed down from father to son. But that it is, in the first instance, in a great measure often brought about by the depredations of the before-mentioned undesirable class of visitors, is only too true. The multitude of locked gates in the "hopping" districts unfortunately but plainly testifies to this conclusion. Selbornians have naturally done something towards dissuading the thoughtless from making themselves objectionable to the farmer while wandering beneath his hedgerows and through his fields and woods, but it is impossible that their efforts have either had or can have any very far-reaching results, for, notwithstanding their continuous efforts in this direction, it is probable that the thoughtless and the rowdy will always form a considerable portion of the community. The settlement of the open gate grievance therefore rests with the farmer entirely. Let him put up stiles close to his field-gates, and he will then not only protect himself from annoyance, but will give the better class rambler a chance of allowing him credit for honesty of purpose.

WALKER MILES.

Battersea Park and the L.C.C.—The misdirected—some would say mischievous—energy of the London County Council is apparently about to be directed to Battersea Park. The following protest against the proposed disfigurement appears in the *Daily Chronicle*:—

"I see the London County Council propose to construct a granite parapet to the river front of this park. Would you allow me to protest against such an infliction? Anyone who wishes to see how utterly all the ever-varying interest of the river can be blocked out by a granite parapet has only to take a seat on the Thames Embankment, when he will have a fine view of stone pavement, granite walls, and tops of houses on the opposite side, vieing in dreariness any converted churchyard. This is what we are to have at Battersea Park, instead of the present free and open view of the river. Now for the opposite picture. Let the spectator go to the Tower Gardens, Greenwich, or Blackwall Piers, or the Royal Victoria Gardens at Woolwich, and see the difference. Instead of dull dreariness of walls, you have life, animation, and beauty of the river, with its numerous craft. Imagine the Parade at Brighton with a nice granite parapet!"

NATURAL HISTORY NOTES AND QUERIES.

Little Owls.—In the early spring of 1897 a pair of little owls (*Athene noctua*) were seen about a farm in Hertfordshire, and roosted in an old barn. They afterwards nested in a hollow branch of a pear-tree and hatched two young ones, of which one died, owing probably to its falling out of the nest. The other young one is now frequently seen in company with the old birds.

T. F. B.

Seals on the Lincolnshire Coast.—The vicinity of the Wash, with its tortuous channels and dangerous navigation, has always been a noted haunt of the common seal. In hot weather, at ebb-tide, numbers may often be seen basking on the sands or wallowing in the shallow water at the edge of the banks. A remarkable capture of these graceful creatures came under the writer's notice whilst at Boston last July. The skipper and crew—four, all told—of a local smack, for want of something better to do, undertook a raid through Boston deeps. Upon the Dog's-head sand a large seal, apparently asleep, was observed. With caution the men landed, and surrounded the animal, which, after a fierce resistance, was partially stunned by heavy sticks and secured. Early the next morning a small herd of five seals, also in a state of somnolence, was sighted on the Knowle sand. These were carefully approached, and, being smaller in size than the first, were seized without much difficulty. The whole were carried alive to Boston and exhibited at a modest charge of two pence each for adults and one penny for children. Elated, doubtless, by the result—pecuniary and otherwise—the fishermen, a day or two afterwards, went out again to the Knowle sand, and, under similar circumstances, captured four more seals. Of these one was a very fine specimen, weighing considerably over three cwt. This animal fought desperately for a long time, but was at last overpowered and hoisted on board. Both in regard to number and size these are said to be record catches for the district. The fact of the men being able to cut off the retreat of the animals on each occasion is a rare event, for the latter are most timid, and their acute sense of smell, keenness of sight, and ready aptitude for avoiding danger are well known. It is to be hoped that this wholesale taking will not be repeated, for it would be a pity to drive the interesting seals entirely from the coast.

H. CHIPPERFIELD.

Cock and Chicks.—I was much interested by a curious occurrence which took place amongst our fowls the other day. There was a brood of young chicks which had been recently deserted by their mother, and as the day was wet and cold the little ones evidently missed their accustomed place of refuge. Nothing daunted, however, they approached the "sultan of the roost," and getting behind him they gingerly inserted themselves under his feathers. To this intrusion the cock in no way objected, but rather seemed to enjoy their company, as one by one they all found a place under his fatherly protection. I myself was the spectator of a no less curious incident; the same brood of chicks were wandering disconsolately about when another chick, about the size of a pigeon, took compassion on them, and, spreading out its wings and feathers, it allowed some five or six to get shelter under it, while the rest of the brood nestled up close to it, as if to gain warmth. I remember also that last year a fowl had a very poor brood and took a fancy to seven young guinea-fowls, which it alienated from their true mother and acted in every way as a true and devoted mother to them. It was very amusing to see some chicks and some young guinea-fowls peeping out from under her feathers. These incidents are the very opposite to what my experience has led me to expect, and I thought that perhaps they might be of interest to the readers of NATURE NOTES.

Fylton Rectory, Glos. A. C. MACKIE.

Partridges and Pheasants.—May I inquire what record we have of partridges and pheasants hatching? About the last week in July, as the harvest was commencing, a hen pheasant was found sitting near where the other was killed (see p. 198) in vetches grown for seed. A man took the eggs and placed them under a bantam fowl, but, owing no doubt to want of knowledge, they all died. About the beginning of the last week in August, when I was gathering mushrooms

in my meadow, a pair of old partridges screamed and fluttered in their well-known fashion, and on looking in the grass I found a brood unable to fly, only a few days old. They scurried and hid, but I picked up a few, and well knowing the extreme improbability from various causes of their surviving, I kept three, which I have now (September 7), and they look healthy, and have grown wonderfully. I feed them on wasp-grubs, crushed wheat, hemp and canary-seed, grass to pick at, and plenty of water to drink, but they instinctively appear to dread man. I once reared nine in a group without loss, and although they knew me quite well from others, they did not get so tame as I should have liked or thought they might do.

Redditch. J. HIAM.

On page 198 I notice a small error in the second line from top—"a *young* pheasant" should read "old" or "hen" pheasant.

The Edible Snail.—In the spring of this year I put three edible snails (*Helix pomatia*) in a glass aquarium, at the bottom of which was moss and earth. They much preferred lettuce to any other leaf, though they ate small quantities of cabbage sometimes. About June 15 a cluster of pearly eggs were deposited in a depression in the soil, a layer of earth being left over them. One of the snails was all through the days succeeding lying over the eggs. After a month the snails hatched out. At night the glass is now covered with young white-bodied snails out for their evening feed. By the morning they have all disappeared into holes tunnelled in the earth. I have kept one of the edible snails before. It always hibernated in the cold weather, remaining buried over six months, though kept in a conservatory. The mouth of the shell was turned upwards in the soil, and covered by a hard operculum. I need hardly say I cannot keep such numbers. Ten have been offered therefore to, and accepted by, the Zoological Gardens.

E. G. WOODD.

Glenthorne, Eastbourne.

TO CORRESPONDENTS.

Ignoramus.—*Ginkgo biloba.*

Beta.—(1) *Pimpinella Saxifraga.* (2) *Sagina nodosa.*

Mrs. Parr.—The *Guide to British Fungi* may be obtained at the Natural History Museum, Cromwell Road, S.W., price 4d. See *N.N.*, 1893, p. 188. Please read Rules 3 and 4.

B. E.—The specimens are bad, and in some cases insufficient. A is *Fagopyrum esculentum*; B, *Farsetia incana.* Please read Rule 3.

Chilworth.—Alkanet (*Anchusa officinalis*).

RULES FOR CONTRIBUTORS AND CORRESPONDENTS.

1. All communications for NATURE NOTES must be authenticated with name and address, not necessarily for publication.

2. The return of unaccepted contributions cannot be guaranteed. We cannot undertake to name specimens privately, or to return them.

3. Communications for any number must be in the Editor's hands by the 10th of the preceding month.

4. Communications for NATURE NOTES should be addressed to the Editor, JAMES BRITTEN, F.L.S., 126, Kennington Park Road, London, S.E., as should specimens for naming, books for review, &c. The Editor cannot undertake to reply privately to questions.

5. Letters connected with the Selborne Society, as well as all inquiries as to the supply of NATURE NOTES, and subscriptions, should be addressed to the Secretary of the Selborne Society, A. J. WESTERN, Esq., 20, Hanover Square, W.

6. The Editor is not responsible for the contents of the last page of each number; communications respecting that page must be addressed to Mr. WESTERN, as above.

SELBORNE SOCIETY NOTICES.

Obituary.—It is with great regret that intimation has been received of the death of the Rev. Prebendary Gordon, which took place on Sept. 22. Mr. Gordon was one of the earliest and most sympathetic members of the Society, and his contributions to Selbornian literature were always of a valuable nature.

Donations, Reduction of the Deficit.—The Council acknowledges with thanks the receipt of the following donations: Mrs. S. M. Cave-Browne-Cave, 10s.; Miss L. M. Dixon, 20s.; Miss H. B. Thompson, 2s. 6d.; A. Hill, Esq. (Birmingham Branch), £2 2s. Members are earnestly requested to assist in meeting the deficit, which now amounts to £65.

The thanks of the Council are also tendered to the following, who have announced their intention of doubling their subscriptions next year:—Mrs. Turle, Miss E. Lecky.

Central Winter Meetings of Selbornians.—It has been suggested that social gatherings for purposes of conversation and mutual encouragement should be held during the winter at the offices of the Society, 20, Hanover Square, W. The Council is willing to arrange a series of six such monthly meetings, with a short address and refreshments, provided a guarantee fund be raised of £20. Members interested in the project are asked to communicate with Mr. A. J. Western, with a statement of their views on the subject. It has also been suggested that such meetings should be held on the first Tuesday in each month, from 3 to 5.30.

Lectures for the Winter Season.—The Secretary will be glad to hear from Hon. Secs. who are requiring lecturers during the coming season, and also from competent ladies and gentlemen who are willing to lecture on behalf of the Society. The following gentlemen have already volunteered their services as lecturers:—J. S. Cooke, Esq., F.L.S., F.G.S., 26, Avenue Road, Weymouth; James Saunders, Esq., 49, Rothesay Road, Luton; A. P. Wire, Esq., M.C.I.S., 1, Seaton Villas, Birkbeck Road, Leytonstone; Lieut.-Col. Coulson, Fourstones-on-Tyne.

Lantern Slides of Selborne.—Attention is called to the set of slides in the Society's possession, illustrating the village of Selborne. These can be borrowed by Hon. Secs. of branches, or by members recommended by them, the borrower being responsible for the cost of carriage.

Final Field Club Ramble of the Season:—

October 2.—Croham Hurst and Sanderstead. Take return tickets to East Croydon. Victoria, 2.35; Thornton Heath, 2.55; London Bridge, 2.25 (L.B. & S.C.R.). Walk to Ballards Wood and Croham Hurst, where tea. After tea to Sanderstead, where take train at 7.34. Guide, Mr. E. A. Martin.

Lectures on Geology.—Intimation has been received that a course of twelve lectures will be delivered by Dr. K. H. Traquair, LL.D., F.R.S., in the Lecture Theatre of South Kensington Museum, on Mondays, Wednesdays and Fridays, at 5 p.m., beginning on Monday, October 4. Admission free.

Council and Committee Meetings:—

The next meetings of the Council will be held on Tuesdays, October 5 and November 2, at 5.30; of the Magazine and Leaflet Committee on Tuesdays, October 19 and November 16, at 5.30; and of the Finance Committee on October 19, at 6.15.

NEWS FROM THE BRANCHES.

Southampton and New Forest.—The Rev. J. E. Kelsall has been compelled, owing to removal from the neighbourhood, to resign the Hon. Secretaryship of the Branch. The Council tenders its best thanks to Mr. Kelsall for his efforts on behalf of the Society.

EDWARD A. MARTIN, F.G.S.,
Hon. Sec. Magazine and Leaflet Committee.

Nature Notes:
The Selborne Society's Magazine.

No. 95. NOVEMBER, 1897. Vol. VIII.

THE FARMER'S FRIENDS.

THE Board of Agriculture have lately issued a series of leaflets dealing with those birds which are undoubtedly useful to the agriculturist. They do not pretend that the birds they have dealt with are the only useful ones, for probably every bird that flies does some good to man, but they have selected a few in which the good far outweighs the bad, and which notwithstanding are unfortunately even now marked out for slaughter by gamekeepers and farmers.

Sentimental appeals for mercy to people who think birds injure them financially must ever be futile, but once convince keeper and agriculturist that certain birds are really of service to them, and there will be little need of Bird Protection Acts for those particular species. The real difficulty is to bring conviction to their minds. They resent any casual interference, and it is often impossible to give at the time ocular proof in favour of any particular bird, and equally impossible to controvert on the spot condemnatory statements as to alleged facts, however improbable those statements may be.

I once asked a farmer why he shot squirrels, expecting as an answer that they sucked the eggs of the game birds. To my astonishment he said they killed rabbits and sucked their blood. I pointed out to him how contrary such things were to the natural habits of the squirrel, and asked if he had ever caught one in the act. No he had not, but some one else had. I took the trouble to find out this some one else, only to discover that he had never actually witnessed such an occurrence, but he had been told by some one that somebody else had once seen a squirrel attack a rabbit. It is on evidence as untrustworthy as this, that many birds have had given to them an evil character which is the converse of the truth.

But when one of the Departments of State, free from prejudice or sentiment, and with its facility for obtaining accurate information, publishes facts concerning the value of certain birds to farmer and gamekeeper, such facts ought to carry conviction to the mind of any sensible person. This is what is said of that pretty little hawk the kestrel: "The wholesale destruction of such birds as the kestrel, is frequently the main cause of abnormal and sudden attacks upon crops by animals and insects. In favourable conditions of climate and other circumstances, and in the absence of the checks provided by nature against their undue increase, certain animals multiply exceedingly and do infinite harm, as was exemplified by the serious injury occasioned to grass land in parts of Scotland by voles in 1892. Insects also appear more frequently and in larger numbers in these later days, owing in a degree to the destruction of birds, their natural destroyers. Mice certainly form the principal part of the food of the kestrel. It also feeds on beetles, especially cockchafers and wire worms (the larvæ of clock-beetles) and frogs." In the report of the Committee which inquired into a plague of field voles in Scotland in 1892, it is stated that the food of the kestrel is known to consist almost exclusively of mice, grasshoppers, coleopterous insects and their larvæ.

Even a good word is found for the sparrow-hawk, which certainly does eat a few young birds, but as it generally hunts at dusk when the chicks are under cover of the hen, it does less harm than is usually charged against it. On the other hand, it undoubtedly does good. "Mice, voles, and insects, are sometimes taken by this hawk." Seebohm says that it "is beneficial because it kills wood-pigeons, which are a fearful pest to farmers in some localities." This is corroborated by evidence cited in the Report of the Committee of the House of Commons on the protection of Wild Birds, in 1873, to the effect that the wood-pigeon is the natural food of the sparrow-hawk, which is the only bird that can catch it.

Another leaflet deals with owls, and quotes overwhelming authorities as to their being beneficial to the agriculturist, and it is pleasing to know that this fact is making headway in country districts, and there are many farmers who recognise the owl as one of their best friends.

With regard to the Tit family, the Board of Agriculture are equally emphatic. "All the titmice are more or less active hunters of insects, for which they are constantly on the watch, and no inhabitants of the insect world come amiss to them as food. They are especially useful in the destruction of many crop pests, which they devour in all stages. During the winter "they clear off enormous quantities of eggs which have been deposited by insects of various kinds in dormant buds or near the buds, and in the clefts of the bark or rind of trees. At this season the titmice may be seen frequently running up and down the trunks, stems and branches, or hanging head downward from

the smaller branches and twigs, prying anxiously into each crevice and fold of the rind, in search of eggs, hibernating larvæ, or perfect insects. Their sight is so keen that they can detect such small eggs as those of the winter moth, and they have been seen actively devouring the minute red eggs of the *bryobia* upon the stems and branches of gooseberry bushes and damson trees. It is sometimes alleged that the tits, like the sparrows, pick out the buds of trees and shrubs, either wantonly or for food, but this accusation is wrong and based upon insufficient investigation of the circumstances, as titmice attack only buds that are infested, for example, apple, pear and plum, and damson buds, infested with the larvæ of the winter moth, or the larvæ of the apple blossom weevil."

Dealing specifically with the long tailed tit—the bird which builds that wonderful and beautiful nest shaped like a bottle, decorated externally with lichens and spider webs, and lined internally with thousands of warm feathers—the testimony of Brocchi is quoted, how in France these birds feed entirely on insects, and that it and all species of tits have a right to the protection of agriculturists to whom they render important services. He—Brocchi—estimates the annual consumption by each of these birds at nearly 200,000 insects in the form of eggs and larvæ, and remarks that when they attack the buds of fruit trees, an offence with which they are sometimes charged, it is certain that there are insects within those buds.

The lapwing, or peewit, is a bird which is rapidly decreasing in numbers, by reason of its being destroyed not only in the adult stage, but in the egg, thousands of which are gathered annually and sold as plovers' eggs, and unless some steps are soon taken to check this wholesale destruction, the farmer will lose a most valuable assistant.

"No other bird is so beneficial to cultivators as the lapwing. It devours snails, wire-worms, beetles, aphides, the larvæ of various insects that infest grass, turnips, wheat and other crops, and other pests. As it feeds in the evening it has opportunities of getting at many insects which commit their depredations after sundown. On account of their insectivorous habits peewits are sometimes kept in gardens where their valuable services are highly appreciated."

Perhaps the Board of Agriculture have never done the farmer better service than by publishing these leaflets. They have in the past taken great pains to enable him to identify the various insects which do him damage, but man unaided is nearly powerless against these minute enemies. They have now pointed out to him the fact that the birds are his faithful servants in this respect, and these leaflets ought to be read by every agriculturist and gamekeeper in the country. Selbornians should make an effort to spread them far and wide. They can be obtained from the Board of Agriculture, Whitehall Place, S.W., free of charge, post free, and the letter applying for them need not be stamped.

FRED. W. ASHLEY.

THE SPOILING OF THE LAND.

EVERY one will allow that there is a vast difference between profession and practice, and this discrepancy may be observed in various matters not altogether unconnected with Selbornian principles. Ladies are habitually tender-hearted, yet they appear, even at meetings of the Selborne Society, with "ospreys" in their bonnets. We felicitate ourselves on our increased appreciation of music as evidenced by the large attendance at the high-class concerts which Mr. Robert Newman provides at Queen's Hall; but we do not scruple to strike matches during the prelude to *Lohengrin*, or the *vorspiel* to *Parsifal*—quite the contrary, for the hall echoes with the reports—and Mr. Newman, apparently thinking that music cannot by itself be attractive, carefully refrains from any attempt to control the outrage upon Wagner. The London County Council plants hundreds of unnecessary trees in unsuitable places on Hampstead Heath, and propounds equally efficacious schemes for "improving" the view at Chelsea and Battersea; yet it is incapable of doing anything to relieve the dreary monotony of the borders on the Victoria Embankment, or to introduce the numerous hardy flowers which would make the present depressing arrangements radiant and beautiful.

In the same way we are never tired of writing about the charms and beauties of Nature. If we were to bring together all the books written on this text during the last ten or twenty years we should have an extensive library. Yet at the present time a policy is being pursued, if not throughout the country, at any rate in almost if not quite in every direction within a radius of fifty miles from London, which, if persisted in with the determination of the last two or three years, will result in the destruction of some of the most delightful features of our country walks, and in the extermination of the objects which, for the naturalist, give to these walks their special charm. We called attention to this at some length in NATURE NOTES for July, 1896, and the importance of the subject justifies our recurring to it; for so far as we are aware, nothing is being done to check the vigorous and general attack upon much that a Selbornian might be supposed to hold dear.

The special charm of a country lane or unfrequented road is largely due to the varied and free-growing shrubs which form the hedges, the flowers which adorn the banks, and the strips of grass of greater or less width which border the roads on either side. That the needs of cultivation require each of these to be kept within certain bounds no reasonable person will deny. The hedges must not grow so high as to overshadow the fields which they bound; the banks, especially when, as often happens, there is a ditch or trench at their foot, must not be allowed to interfere with the course of the rain or other water; the grassy margins must not encroach upon the roadways. These provisions are

so obvious that they hardly require mentioning, and we only refer to them in order that we may not be accused of a wish to encourage "wild nature" to the detriment of the farmer or the traveller.

At present, however, every one of these characteristic features of our English scenery is not only in imminent danger, but actually in course of destruction; and the result in many districts is alarmingly apparent. The road-side strips of grass, pleasant to the eye and restful to the feet, have been ruthlessly stripped and scraped away, and this in little-used country roads, already more than broad enough for any traffic that is ever likely to pass over them. The hedges are cut down—not by the farmer, who might plead justification for such action, and not only when their exuberance encroaches on the footway, but even when a ditch runs between them and the road: or they are cut straight along the front, so as to present a uniform straight surface. The vegetation of the banks is ruthlessly torn, scraped and scarified—not that it is doing any harm or in any way interfering with the good ordering of roadway or footpath, but apparently because it is necessary to find work for certain folk when nothing useful can be found for them to do. The result of this cannot fail to be the extermination of many rare and interesting plants. To make matters worse, the loppings of hedges, the *débris* from the banks, the scrapings from the road-sides, are in many instances left for days, and even weeks, to blow about where the wind listeth, thus producing an effect of untidiness greatly in excess of that which these features would present if left alone.

In what we have written there is no word of exaggeration. We can cite, simply from the observations of this autumn—for this year the work of devastation began earlier than last—numberless instances of everything we have mentioned, and of many similarly destructive operations. So far as we can learn these operations are undertaken at the order of the local District Councils. We may be wrong, but the impression conveyed to our minds is that these bodies employ a certain number of men for whom they are bound to find occupation, and there being, as we have already said, nothing useful for them to do, they are turned on to this kind of work. If this be so, things will go steadily from bad to worse. Indeed, they are already progressing in that direction, for this year the work has not only begun earlier but it is being carried out more vigorously.

We see only two ways in which this disastrous state of affairs can be remedied. The first is by means of the press, which, unfortunately, has so far been singularly apathetic. The second is by the presence on the local district councils of men who will use their influence in the direction of restraining the destructive policy which apparently dominates these organizations. If Selbornians in their respective districts would take the matter in hand, and get themselves or other suitable persons returned for

these councils, much might be done. In societies like our own there is too often a sad disproportion between talk and work; here is a matter which urgently calls, not so much for consideration as for immediate action, for the evil is being perpetrated far and wide, with a mischievous thoroughness which can only be arrested by prompt action. We call upon all true Selbornians to take the matter up, and to use whatever influence they may possess in staying the progress of what on a former occasion we called "the uglification of England."

GOATS AND SHEEP IN NORTHERN INDIA.

I HAVE a few facts in regard to some of these breeds, which have been furnished me by Mr. John Barlow, which, I think, may form an interesting little paper for NATURE NOTES.

Perhaps in most parts of India the similarity between these allied animals is more apparent than it is with us here at home. Most of our English goats, I believe, have sprung from a wild breed of Persia and the Caucasus, and it is alleged that the greater part of our short-tailed sheep owe their origin to the mouflon of Corsica and Sardinia, countries wide apart from the home of the goats.

Mr. Barlow, in his notes, mentions seven varieties of goats which he has observed in and about Peshawar and the Northern Indus. The first, and in his view the finest, are those reared in the mountains and glens of Kâghân, a dependency of Hazârâ, a British district in the Punjab, bounded on its west by the Indus. Large herds of these goats are brought down in the winter months, and are sold at the market-fairs at Peshawar and Rawalpindi. The pasturage of Kâghân is held to be exceptionally rich, and the goats thrive very well upon it. This species fetches in consequence the highest price amongst well-to-do natives. Some of these goats stand nearly three feet in height, and weigh sometimes over a hundred pounds, and are so strongly built and powerful that they have been known to carry a native on their backs for a considerable distance at an easy gallop.

The next breed he refers to is reared in the Punjab generally, and has nothing remarkable but its long hair. Then again, there is a smooth and short-haired variety of goats, known to the natives as Jumna-pâree, which, as the name applies, are bred across the river Jumna, and brought to the *entrepôts* of Peshawar and Rawalpindi. There is also the Bengal variety, short of stature, the females of which are renowned for their milk-giving properties, yielding, if well fed, about three Bengal seers daily, or, say, four pounds in weight avoirdupois. There

is another goat of a reddish colour called "Burburee" by the natives, and reared in the North-west Provinces. This group is very imposing in appearance, and the females also furnish an abundant supply of milk, but not so much as the Bengal variety referred to above.

There is yet another race of goats, peculiar to the Jhelum district, and more especially to the village of Khâll, in Chukwâl-Tyseel of the Jhelum. The bucks of this breed have long and massive horns which sell in the markets of Peshawar for fabulous prices. This group may possibly be the "Markhor" of our naturalists.

Last, but not least, is the celebrated Kashmir goat, which has long hair, is very stout and hardy, and admirably suited by nature to withstand the rigour of the climate, which is its natural home, for it has, in addition to this long outer hair, an inner wool or fleece next the skin which is called "Pashmina" from the Persian word "Pashm," wool, and from which the best shawl wool is obtained. These goats are not actually bred and reared in Kashmir itself, for that valley would be too warm for them, and perhaps too damp, but they really come from the Tibetan Himalaya.

Mr. Barlow describes how valuable the hair of the goat is to the natives of India, for out of it they manufacture both stout rope and a fine cord, the latter being used specially for the lacing of their "châpais" or bedsteads. Excellent sacks, too, of sizes to suit the backs of camels, bullocks and mules, for the conveyance of all kinds of merchandise, are also made from goats'-hair, the black being preferred as more pliant and stronger. Like the Hebrews of old, who "made curtains for their Tabernacle" out of the hair of goats, so the natives of this part of India often use it for such like purposes. Of the skin they make capital leather, and dye it of several colours, but they fix usually upon *red* for the "uppers" of their women's shoes, and for ornamenting their native saddlery.

Perhaps one might say here that the animals that were first domesticated by man were probably goats and sheep. Abel was a keeper of sheep, and Moses herded the flock of his father-in-law; indeed, the tending and feeding and guarding of these animals is referred to in the most ancient records that have come down to us.

Collected as they must always naturally be in large flocks, they are at all times liable to outbreaks of murrain, and this is perhaps especially so in the localities I have referred to above, and in the Himalayas generally.

To combat this disease, Mr. Barlow says the remedy with the natives is by inoculation, and there is always to be found in many villages a man known as the "Augâh," meaning literally "inoculator." His process is, when a murrain breaks out, to take the flock to a distance from the village beyond the hearing of a dog's bark, and then to remove the caul of the liver of an

animal who has died from the disease, and dexterously to introduce some of the poisonous membrane into the root of the ear of every goat of the flock, and by this means he seems to be able to arrest the spread of the murrain amongst the flocks and herds that may have become infected.

Amongst his memoranda I find Mr. Barlow alludes to a habit with the Indian goats, which may not, however, be peculiar to those only, of a sort of low groaning noise or deep murmuring sound emitted by them after grazing all day, and which the early Mahommedans were not slow to observe, and to attach to it a legend of their own. Their saying is, that Moses was with his flocks one day, and was suddenly struck with fever, and that the goats in unison began to pray for his recovery, and have been mumbling this prayer ever since.

But I must hurry on to describe some of the sheep of that northern part of India. First of all, and by far the handsomest is what is designated by the natives "Beeangee." Their home is the snow-line towards "Spiti" and "Lahool" in the "Jalandhar" district, not far from "Kangra"; and where the majority of the population are Tibetans, who pasture goats and sheep on their southern table-lands. During the annual migrations, these sheep are brought down in flocks to the salt mines of the Rajah of Mundie. Each sheep then carries across its back a couple of sacks containing together about ten pounds of borax, for which these tribes find a ready sale, and when the winter is over many of the sheep are taken back with a return load of salt and crude sugar which they call "goor." It is noteworthy that every flock is preceded by two or more hardy goats, who are considered better able to lead the herd than their timid cousins. These "Beeang" sheep, both males and females, are furnished with horns, those of the former being large and elegantly twisted. Their wool is both long and fine, and is woven by the people into warm blankets which are much esteemed.

There is also the "Guddee" sheep, which are bred in the Himalayas, they are hardier than the "Beeangee," but in no way to be compared with them in weight or appearance; the flesh, however, is much prized by Europeans on the hill stations of Simla and thereabouts. Hindoos as a rule prefer eating the flesh of goats rather than of sheep, and they choose goats in sacrifices to their gods. The Mahommedans, on the other hand, esteem the flesh of sheep, while it is a common saying with natives of all religions, "See how quietly the sheep takes his death, and how noisy and clamorous is the goat when about to be killed."

Again, there is the variety chiefly to be found in the North-west Provinces, which is possessed of a long pendulous tail, and is styled the "Doombah" from the Persian word "Doom" a tail; but their flesh is inferior to the short-tailed sheep of the Punjab, and which are known generally as "Choor-rurâ."

These Doombah sheep accumulate so much fat that they are a burden to themselves, and their caudal appendages, called the "lât," has to be supported artificially by a board. Their fat is largely used in the manufacture of soap.

Next is a short-eared, black-faced sheep known in the Punjab as the "Boocha." This is frequently brought to the markets, and is readily sold, as the flesh is very good eating. It has no wool to speak of, and is reared by most of the nomad tribes of the hills. Next we come to a reddish brown variety, which has its habitat in the "Waziri" mountains amongst the warlike people of that name, who reside near "Bannu" and "Dour." Another and a large sized sheep, heavily built, with a much arched face and long pendulous ears, is brought from the Shapûr district, chiefly on the "Thull" or plain of "Mitha" Tewânâ. When grass fed this sheep will frequently scale a hundred pounds, and the meat is thought a delicacy by many in and about that locality. There is lastly a class of large horned sheep, the rams of which are used for fighting purposes by Rajahs and others. These rams are so strong and powerful that they have to be secured by stout collars and massive chains, and are frequently so savage that if they should by any accident get loose they will run at any living thing they come across, and rather than do nothing, the natives say, they will make a full butt at a wall or tree, even though the impact may break their horns. Ram fights are frequently organised in the towns, and the mode of fighting of these warriors, when first opposed to each other, is to run backwards for a few yards and then charge at one another with the utmost speed, their skulls and horns coming into violent collision, and this is repeated time after time, until one or other turn tail. Any ram, which has established a record, will fetch a very exaggerated price in almost any part of the continent of India, for the breed is everywhere known and sought after.

J. F. A. McNair, Major R.A.

GLIMPSES INTO PLANT-LIFE.*

MRS. BRIGHTWEN has once more laid Selbornians under obligation by this addition to their bookshelves. We have before expressed our opinion as to the merits of her works, the chief of which is that they are the outcome of personal and careful observation. But they owe much to their simplicity of style: Mrs. Brightwen does not attempt fine writing, nor does she consider it necessary to evolve

* *Glimpses into Plant-Life: an Easy Guide to the Study of Botany.* By Mrs. Brightwen, F.E.S. With illustrations by the author and Theo. Carreras. 8vo, pp. 351. Fisher Unwin, London, 1897. Price 3s. 6d.

new and startling theories; yet she never irritates by insisting on the obvious, and no trace of self-consciousness mars our pleasure in reading her essays. Would that all "popular" writers on natural history would imitate her in these characteristics!

This little book is just what it professes to be—an easy guide for boys and girls to the study of botany. And it starts at the right place, among the living growing plants. The author begins, not with definitions and terms—these come at the end of

YOUNG SCOTCH FIR GROWING IN HOUSE-LEEK.

the book—but with a chapter entitled "Adaptation," full of interesting facts, most of them matters of common observation, which go to prove what a very living thing a plant is, and "how persistently under all hindrances and difficulties it will endeavour to carry out the purpose of its creation." The remark quoted is *àpropos* of a Scotch fir, which got sown in a lump of house-leek on the top of a garden wall, and struggled on for eight years until it became a symmetrical well-branched tree, almost twelve

inches high. By a supreme effort it produced a crop of tiny cones and then—we feel so sorry for it!—died from drought and starvation. There are thirteen other chapters all in the same simple, lucid style, wonderfully free from technicalities and yet wonderfully scientific. In these, roots, stems, leaves, buds, flowers, fruit, and seed are successively introduced, and there are also chapters in pollination, fertilization, seed dispersion, germination, physiology, insectivorous plants and habit of growth.

Mrs. Brightwen, so to speak, takes us by the hand and shows

OAK IN WINTER.

us the actual thing, often driving facts home by personal examples. She is telling us about air-roots, and we understand at once why she misnames the Aroid House at Kew, spelling it Aëroid. It is the wonderful air-root she is thinking of, not the family of monocotyledons, and the lapse becomes a mnemonic. Perhaps the most suggestive chapter is the one on tree stems, where a walk through a wood on a February day proves full of interest. For the sap is beginning to rise in the trees, and the wood is swelling; the hard, inelastic bark is splitting and cracking, and the clean new bark within stands out in bright contrast with the dull grey of the rest of the trunk. We see, too, that in no two trees is the character of the bark the same, and with a little practice we shall come to recognize the different species as easily in winter as when they have put on their full summer dress. The chapter on physiology, generally a

stumbling-block for those who are trying to simplify or popularize the science, gives a brief but coherent and accurate account of the processes of nutrition, assimilation and reproduction; and several easily performed experiments are suggested in proof of the facts adduced.

Of course there are a few slips, but the list of errata is small. On p. 42 the Spanish moss is called *Tillandsia usnoides;* the specific name should read *usneoides*, recalling the lichen *Usnea*. The figure of a flower on p. 153 depicts the Chinese primrose, not our ordinary species. It is well to avoid the terms "exogens"

SNAKE-BARK MAPLE.

TURKEY OAK STRUCK BY LIGHTNING.

and "endogens" for dicotyledons and monocotyledons; the author does her best to explain them, but they were founded on a misconception of the mode of growth of the stem, and are better not used. "Cocoa-nut" should be replaced by the more correct spelling "coco-nut."

A good deal of care has been expended on the illustrations, and the numerous original wood-cuts, specimens of which we are enabled to reproduce, are clear and very useful; they show all that is wanted without being elaborate.

A. B. Rendle.

THE LATE PREBENDARY GORDON.

IN the death of the Rev. Prebendary Gordon, of Harting, Sussex, which took place on September 21, the Selborne Society has lost a very warm friend and supporter.

Vicar for thirty years of the little Sussex village of Harting, which lies under the northern slope of the South Downs, in a lovely tract of country, and constantly walking over his widely-scattered parish to visit the more distant members of his flock, he knew and loved every inch of the country, and studied it with the eye of a naturalist.

From long study he knew every kind of bird that visited those parts, looking out for the early arrival of the swallows—the date of their coming being always noted by him—and watching with interest the arrival of our other migrants. He came gradually to be looked upon as one of the great authorities on Sussex birds, and was written to and consulted on any difficult point by naturalists in all parts of Sussex, and indeed far beyond that county.

He loved the birds, and taught his school-children and village people to love them, and not only to love them, but also to study their habits and take an interest in them, and the district became a home and a protected place for the birds.

His enjoyment of the beauty of Nature was intense, whether it were the evening sunlight tinting the soft outlines of the Downs, which he would watch with delight from his garden, or the sight of the first "rosy plumelets" of the larch, that he would bring in from his drive in the early spring days; everywhere he was always on the look-out for the thousand delights that may be found by those who, like himself, are loving students of Nature.

He was an able lecturer, all he said and did being full of a vigorous and interesting personality. He took as his chief subjects the lives and habits of the birds; but he has also spoken on botany, a subject in which he was keenly interested, discovering several of our rarer flowers and plants in the district round Harting, hitherto unnoted as known in that part. The neighbourhood is particularly rich in orchises, growing on the chalk slopes and in the sheltered hollows of the Downs, and to his great delight he raised the recorded number as found in Harting parish to nineteen different species. But the habitats of these rarer flowers he only disclosed to those whom he could trust as lovers and preservers of Nature.

He was for many years an ardent bee-keeper, lecturing on "bee-keeping" to Sussex audiences, and he tells us that for the first five years in which he kept bees he watched their habits daily.

Mr. Gordon was something of an antiquary, always on the look-out for any old coins turned up in his neighbourhood, and

had himself, from time to time, carried out excavations on the Downs. About three years ago he traced out a very fine Roman or British Camp on the summit of the South Downs above his village, which was surveyed and confirmed by the Ordnance Survey.

But in all he said and did was that reverent love of Nature, and care of her work, which we wish to see in all our members; and in recording our loss we feel that we have indeed lost one who was full of the spirit of our work, and who spent his life in spreading that spirit among others.

NATURE NOTES FROM NORTHERN TASMANIA.

OCTOBER 26. A curious spider with lumpy body and two protuberances at the extremity of the abdomen, throws itself headlong from the gum leaf with a kind of *click* on being disturbed, and hanging by a thread with its legs closely folded, exactly resembles a piece of dirt.

There is another odd-looking spider which may frequently be seen on the under surfaces of gum leaves, lying in wait for prey. The body is quite triangular, tapering to a sharp point, and the back is like a handsome piece of mosaic, inlaid with various colours. It forms no web, but clings to the under surfaces of the leaves with its legs laid together, and remains quite motionless until something edible comes within reach.

The native shrub called "red currant" (*Coprosma Billardieri*), which shoots up here and there on the clearing, now bears its insignificant greenish flowers, which are succeeded by a small, red berry, edible, but scarcely tempting. The leaves of this shrub are very small, and the stems thorny. There is another, called the "white currant" (*Leucopogon Richei*), which grows close to the sea, the berries of which are of a nicer flavour, while those of its relative, the "native lavender" (*Leucopogon australis*), are not unpleasant.

A small quantity of alluvial gold was obtained from a creek or rivulet running into the Inglis river. The gold is in flattened pellets of various sizes, is of a good colour, and very pure. With it was associated a soft stone, called "red raddlestone," which will make a red streak if rubbed upon wood, and is said to be a good indication of gold both here and in New Zealand. From the same creek-bottom were obtained small black lumps of zinc blende, called by the miners "black jack."

During the past week the notes of the trilling cuckoo (*Cuculus flabelliformis*) have been heard *at night*, beginning about eight in the evening and continuing the greater part of the night. The pleasant rippling notes produced by this familiar bird have a most charming effect when heard after dark, borne through the

trees upon the soft night air, all other birds being then silent. It is said that the English cuckoo (*C. canoris*) has at times the same weird habit.

October 31.—In the sides of a large ditch which runs through a portion of the plains, I have noticed many holes, from half an inch to almost an inch and a half in diameter. Having found one right on the top of the bank, I dug into it with a jack-knife, and eventually turned out a very large black spider, of the family *Mygalidæ*. These fierce creatures have the habit of burrowing into the moist ground and lining their tunnel with silk, stretching an awning of the same material a little above the entrance, but forming no trap-door. They then lie in wait at the bottom of the burrow for any insects which crawl or tumble into its murky recesses.

November 2.—A large and pretty "looper" caterpillar (*Geometridæ*) was discovered stretched upon a twig of the swamp tea tree (*Melaleuca*). The back was adorned with three yellow stripes, between which were wavy black lines; a row of red and yellow spots adorned each side; the true legs were red, and the head white and black. This caterpillar was stretched quite stiffly from one twig to another of the bush, and could not be distinguished from the twigs except by a very close inspection.

November 3.—The cicadas or "locusts" as they are commonly called here, were heard to-day for the first time this season. Their singing resembles the winding up of a large watch, and when dozens of them are going all at once in the hot sunshine, the noise they make is no inconsiderable feature of a summer day in the bush. The commonest are black, with fine transparent wings, and three red ocelli arranged in a triangle on the front of the head between the large compound eyes. The males only have the sounding apparatus, which arrangement causes one of the classical poets to observe, "Happy cicadas! Thy females are deprived of voice!" The latter, while being sung to, are generally engaged in boring with their augers into the bark of trees, the eggs being laid in the grooves thus produced. I have frequently observed them sitting upon the branches of my apple-trees, and have afterwards found the bark notched and scored by their borers. These cicadas are said to be the cause of the sweet white lumps of "manna" which are sometimes found under the eucalypts and other trees, and which exude from the wounds made by their suckers while imbibing the sap of the twigs. I have found small pieces of "manna" upon the stem of one of the tea trees (*Leptospermum scoparium*), exuding from wounds through the bark, and in appearance and taste there did not seem to be any difference between that and the eucalypt product.

The larger cicada is not so often seen, and appears to be nocturnal in its habits, one of them having come thumping against my window quite late at night, attracted by the light inside. I have never heard this species sing at all, nor in the

few individuals which have been obtained by me is there any trace of sounding organs. It is a handsome insect, the broad thorax and upper wings being of a reddish brown tint, the latter beautifully veined. The legs are covered with down, the feet being armed with strong hooks, which enables them to cling with great tenacity to any rough material. The ocelli are three in number, ruby red, and very conspicuous in front of the head. On each side of the thorax is a short thick spine, apparently for defence, as the insect, if irritated, makes sidelong lunges at the annoying object. Empty nymph cases of these cicadas are among the commonest objects of the bush, adhering to tree trunks, and especially to the stems of "man ferns" (*Dicksonia antarctica*), the rough fibrous exterior of which offers a strong foothold for the ascent of the insect from the ground, preparatory to entering the perfect state. There is always a little slit in the top of the thorax and fore part of abdomen, whence the departure has taken place, otherwise the cases are quite perfect, and at a little distance appear alive. Both sorts are found, but strange to say, those of the larger and finer species are the more numerous, the infrequency with which the perfect insects themselves are encountered being due in all probability to their nocturnal habits. Timid caterpillars in little bags woven of silk and charred bark are very numerous on the trunks of stringy barks (*Eucalyptus obliqua*). They can scarcely be noticed when crawling on the tree trunks, the thick fibrous bark of which is generally in a charred condition outside, owing to the running fires of summer. The little larvæ are thus doubly protected: firstly, by the resemblance between their homes and the surface whereon they dwell; secondly, by the very tough nature of the cases themselves, which can hardly be pulled asunder. Having deprived one of these curious little creatures of its home, and placed it in a bottle with some fragments of bark, I found that in the course of a day it had constructed a second home, not a neat little bag like the first, but one from which long pieces of bark stuck out in all directions, causing the structure, when in motion, to resemble a miniature porcupine.

H. Stuart Dove.

Table Cape, Tasmania.

Stock-Doves.—To-day I examined my homes up in the trees in the fields, and found three occupied, all containing eggs. Several pairs of young have been reared and gone off. One of the nests contained three eggs apparently quite fresh. How can we account for this? Do pigeons ever lay more than two eggs at a sitting? I believe I have noticed the same occurrence some years ago, but am not sure whether three young were reared

J. Hiam.

REPTILES AS PETS.*

Reptiles and batrachians are not usually very favourite objects of study among amateur naturalists. Notwithstanding the bright colours of many of the species, their cold slimy skins and the dangerous properties of some of them serve to render the whole of these extensive classes of animals repulsive to many persons; and these avoid frogs and snakes in the same way that most persons would avoid all fungi, except mushrooms, indiscriminately. Yet many naturalists have a fondness for keeping such creatures in captivity, and in observing their habits; and among these is the author of the pretty little book before us, for he recommends keeping frogs and snakes in a fernery in the drawing-room, and has no objection to larger fry, such as boas and alligators.

Mr. Bateman gives us full instructions for procuring and keeping a great variety of creatures of the kind, and many species are illustrated. Poisonous snakes he avoids, and he does not recommend keeping even the common viper in captivity. But he gives us a great deal of very useful information on the best way of keeping non-venomous species from different countries, from boas and alligators to frogs and toads. Among them will be found some of the most curious species known, such as the Tuatera lizard of New Zealand, with its median eye—a structure which has become obsolete in almost all other existing vertebrates.

The appearance and characters of the snakes and lizards noticed are fully described, and much space is also devoted to their habits, especially in the case of the common species. Thus, no less than fourteen pages relate to the ringed snake, including however an incidental notice of the viper.

Various popular errors are corrected, such as the notion that snakes sting with their tongues (an idea which still seems widely prevalent with many people); and that it is only the edible frog which is eaten on the Continent. With respect to the latter point, our author quotes Mr. Boulenger as saying that "The frogs sold in the markets of Paris, Brussels and Geneva are almost invariably *Rana temporaria*, which are commoner, and more easily caught."

We will quote a portion of Mr. Bateman's observations on the edible frog, to illustrate the general style of his work:—"The edible frogs in their native country inhabit rivers, lakes, ponds, running streams, marshes, and even small pools of water. They are not only most active animals, but also exceedingly timid and wary. He who has been attracted to the water's edge by the sound of their strange voices, will be surprised, if he is ignorant of the habits of these creatures, to see on his arrival there little or no signs of batrachian life, for on the very suspicion of danger they will have dived into the water, not to reappear until all signs of an enemy have gone. The wise observer, however, will conceal himself, and remain perfectly still for a fairly long time, and he will be rewarded for his patience and caution by seeing these beautiful batrachians gradually one by one emerge from their hiding places. Then, if he wishes to make any capture, he must summon all his activity and adroitness."

We congratulate Mr. Bateman on having produced a book which contains a considerable amount of general information not easily accessible elsewhere. His book may be recommended as a very useful introduction to the study of harmless reptiles and batrachians, and may serve as an introduction to larger and more technical works. It will, we hope, be read, not only by those who intend to keep these animals in confinement, but by others who are interested in the subject, without having time or inclination to follow it out in this practical manner. The former class, however, will be glad that Mr. Bateman usually mentions the prices at which the various species which he recommends for keeping in captivity can generally be obtained.

The book is provided with a good index, but suffers from almost as great a deficiency as the absence of this would have been, in wanting a table of contents, which would greatly facilitate reference.

W. F. K.

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* *The Vivarium, being a practical guide to the Construction, Arrangement, and Management of Vivaria, containing full Information as to all Reptiles suitable as Pets*, by the Rev. Gregory C. Bateman. London: Upcott Gill, 8vo, pp. 424. Price 7s. 6d.

SELBORNIANA.

Familiar Wild Flowers.—In March last Messrs. Cassell & Company announced prizes for the best collections of Wild Flowers. Several hundred collections have been sent in, and much interest has been manifested by competitors. So satisfactory was the general result that somewhat more than the entire value of the prizes offered has been awarded, and the publishers trust that, inasmuch as the collection will, in accordance with the provisions of the scheme, be distributed to institutes and schools throughout the kingdom, a valuable impetus may be given to the study of the wild flowers of our country. The collections have been judged by Mr. James Britten, of the Natural History Museum, who considers them, taken as a whole, very encouraging.

"Brutal Sport."—*Humanity* for October contains the following paragraph: "An eye-witness writes to us about a most brutal (and presumably illegal) piece of blackguardism which is practised by pleasure-seekers on Crummock Water, one of the Cumberland Lakes, with the connivance of the hotel-keepers and water-bailiffs. The 'sport' consists in turning out a duck to be hunted in the water by terriers. 'It made one sick,' writes our correspondent, 'to hear the shouts of laughter of men, women, and children, from at least three boats, packed to overflowing, at the agony and struggles of one poor little bird.' An attempt to get the names of the ruffians was unsuccessful, the hotel-keepers' only reply being that 'these parties are our bread-and-butter'; and the water-bailiff also refused to take action."

The Fate of the Kew Pelican.—The last performance of the game-keeper has naturally excited universal reprobation; the *Daily Telegraph* records it in its best style, as follows: "Sad to relate, the famous pelican of Kew Gardens, which took to the wing about a week ago, has come to an untimely end. The inhabitants of Brightling, in Sussex, were wonderstruck the other day to see hovering about the village a feathered animal whose dimensions were quite beyond those of any bird that had ever been known to visit that secluded part of the world. Apparently indifferent to the fact that its movements were being closely followed by a motley crowd, the creature quietly settled down in a pond in Mr. Percy Tew's park, and drank copiously of the waters thereof, after the manner of one who has been painfully long without refreshment. Whilst it was thus innocently satisfying its thirst messengers were sent to notify the arrival of the stranger to the nearest gamekeeper. That individual soon made his appearance, and, guided by the instincts of his calling, at once levelled his gun and brought down the ornithological trespasser in the middle of the pond. A retriever recovered the carcass, which, on examination, proved to be that of the strayer from Kew. It measured 9ft. 10in. from tip to tip of wings, 5ft. 9in. from bill to tail, and 3ft. round the body. The bill was 15in. long, and opened to a width of 17in.; weight 21lb."

NATURAL HISTORY NOTES AND QUERIES.

Congregating Swallows.—The assembling of swallows before migration has often been noticed and written of, but I have not seen it mentioned for how long a time beforehand they thus assemble. On September 17, while walking by the river Ver here at 6.30, I heard a loud noise in some willow beds which sounded like rushing water, or a machine of some kind, but on getting close I thought the sound came from birds, and on clapping my hands out flew many hundreds of swallows, which after a short flight settled down again in the thick of the willows. After this I went again to the same place, near the same time, for a fortnight, and they came with perfect punctuality just about sunset. At 5.55 they began to assemble—some evenings there must have been thousands. After circling in the air for a short time, they hurled themselves down and settled into the willows with mighty chattering. A servant who was with me one evening said "it looks as if a chimney was on fire, and the soot falling!" and really it

was a good description. By 6.15 or so all was quiet. Towards the end of the fortnight they assembled rather earlier. I noticed a good number of wagtails once or twice, perhaps two or three dozen, and they also went into the willows. On September 30, only a very few swallows settled in—about a dozen—and some others, perhaps a hundred, after circling round, flew away. On October 1 not one appeared, nor have I seen one since. We only returned to St. Albans on September 16, so I cannot say if the swallows began to assemble before that date.

St. Albans. ROSE TURLE.

A Carnivorous Mollusc.—So rarely is the *Testacella* or shelled slug seen in this country that perhaps you may think it sufficiently interesting to record in NATURE NOTES that I saw one in my garden this morning. My attention was drawn to it by observing a worm wriggling on a bank in the full sunlight. The worm was about five inches in length and the shelled slug a little under two inches, a dirty white in colour. The small ear-shaped shell on the hinder end at once established its identity, and though over nine hours have elapsed since I placed them both in a bottle the Testacella is still voraciously devouring the worm, despite its struggles to be free.

J. F. A. MCNAIR.

Frogs. — We have made a curious discovery this summer in our garden. Some frogs have taken up their abode for the last month in two deserted blackbirds' nests, built in round thick box bushes about two feet from the ground. One frog is generally to be seen alone sometimes on or near the edge of the nest, sometimes comfortably ensconced in the middle, only his head peeping out. In the other nest there are now always two frogs. We should like to know if this is a usual occurrence (we have never found frogs there before), and for what reason they are supposed to go to these nests.

Marlborough. E. A. M.

TO CORRESPONDENTS.

E. G. W.—*Barnia australasiæ.*

M. C. B.—*Mimulus luteus* is naturalized in many places in the United Kingdom.

M. A. P.—Please note that specimens sent for naming should be numbered for reference. The fungus from the heath is *Agaricus laccatus;* that under beech *A. phalloides;* that under chestnut *Cortinarius castaneus;* that from lawn *Gomphidius glutinosus.*

J. G. B.—The two names are variously applied, and there is no definite rule.

RULES FOR CONTRIBUTORS AND CORRESPONDENTS.

1. All communications for NATURE NOTES must be authenticated with name and address, not necessarily for publication.

2. The return of unaccepted contributions cannot be guaranteed. We cannot undertake to name specimens privately, or to return them.

3. Communications for any number must be in the Editor's hands by the 10th of the preceding month.

4. Communications for NATURE NOTES should be addressed to the Editor, JAMES BRITTEN, F.L.S., 126, Kennington Park Road, London, S.E., as should specimens for naming, books for review, &c. The Editor cannot undertake to reply privately to questions.

5. Letters connected with the Selborne Society, as well as all inquiries as to the supply of NATURE NOTES, and subscriptions, should be addressed to the Secretary of the Selborne Society, A. J. WESTERN, Esq., 20, Hanover Square, W.

6. The Editor is not responsible for the contents of the last page of each number; communications respecting that page must be addressed to Mr. WESTERN, as above.

SELBORNE SOCIETY NOTICES.

Donations towards Reduction of the Deficit.—The Council acknowledges with thanks the receipt of the following donations: Miss E. K. Hitchcock, £1; C. B., 5s.; Mr. G. H. Edwards, £1 1s.; Mrs. Hervey Pechell has kindly promised to double her subscription for next year.

The Council is anxious to clear off the remaining portion of the deficit as soon as possible, and would be glad if Hon. Secs. of branches would lay the matter before their Committees, with a view to send some special contribution to the parent society. Remittances should be marked as being for the Deficit Fund.

Local Representatives.—In addition to the Society being represented by the Hon. Secs. of Branches, it has been decided to appoint Local Representatives where there are no Branches. The Selborne Society is still unrepresented in many towns and districts where its influence is urgently required. Many members of the Society are scattered throughout the country, and are perforce somewhat out of touch with the work that is being done. It is these especially to whom we now appeal. Members who are willing to act in such a capacity are requested to communicate with Mr. Western, when further particulars will be sent.

New Lantern Slide.—Mr. R. Marshman Wattson has heen good enough to present the Society with an additional view of The Wakes at Selborne. The view is from the back, and is from a photograph taken by himself.

Council and Committee Meetings:—

The next meetings of the Council will be held on November 2 and December 7, at 5.30; and of the Magazine and Leaflet Committee on November 16 and December 21, at 5.30.

NEWS FROM THE BRANCHES.

Bath.—In the July number of *The Bath and County Graphic*, we note a capital portrait of H. D. Skrine, Esq., J.P., D.L., the venerable President of the Selborne Society at Bath. In the same magazine we have read with pleasure No. 9 of a series of Picturesque Village Rambles from the facile pen of Mrs. Wheatcroft, the indefatigable Secretary of the Branch, the subject of the Ramble being the village of Woolley.

Hatfield Hyde.—The Rev. H. G. O. Kendall reports satisfactorily of the interest of the junior members in the work of this Branch. Visits have been paid to the Natural History Museum during the summer. Lectures have been given to the children in the school, and rambles have been taken of both zoological and botanical interest, as well as visits paid to neighbouring churches.

Southampton and New Forest.—In taking leave of the members of this Branch, the Rev. J. E. Kelsall invites applications for the post of Hon. Sec., which he is now compelled to relinquish. He points out that there is plenty of good work to be done in the neighbourhood. He adds:—"There is ample opportunity for an enthusiast to lecture, to write in the local press, to organise bands of mercy, to influence County Council and Parish Councils, to organise Selbornian teaching in schools, and to help the cause in a hundred other ways."

Croydon and Norwood.—The first of the winter meetings of this Branch will be held on Tuesday, November 16, when Mr. F. W. Ashley, F.Z.S., will lecture to the members of the West Croydon Christian Social Institute, on "The Utility of Birds." Mr. W. H. Coldwells has kindly consented to supply and operate with the lantern.

EDWARD A. MARTIN, F.G.S.,
Hon. Sec. Magazine and Leaflet Committee.

The Rev. Prebendary Gordon.

[See p. 213.

Nature Notes:
The Selborne Society's Magazine.

No. 96. DECEMBER, 1897. Vol. VIII.

A COUNTRY GARDEN IN WINTER.

TO people who live in towns a country garden in winter is suggestive of unutterable dreariness. A garden is, they allow, endurable in summer, though even then it gets unconscionably dull after a time. Still, when the flowers are in full bloom and the trees in leaf, a garden is undeniably pretty, and aided by tennis parties and a plentiful supply of fiction from Mudie's, one may find it very pleasant for a fortnight or so, *provided* the weather be fine—for if rain should set in there is nothing for it but to take the first train back to town. But in *winter*—ugh, the very idea makes one shudder! Can a garden possibly be a source of pleasure in winter—when the trees are bare, the grass lank and sodden, and the flower-beds empty of everything but decayed stumps and withered leaves? Would any sensible person even glance at a garden under such circumstances, or in fact stay in the country at all, unless it were for hunting or shooting?

Now to all who are of this opinion we must oppose a polite but firm denial. He who cannot enjoy a garden in winter never really appreciated it in summer. He was content to loll in an easy chair on the lawn, or stroll aimlessly down the paths, smoking his pipe or picking a flower here and there. He never explored the hidden beauties of the garden, never noted the gradual expansion of the buds, or learnt to distinguish between the notes of different birds, and the markings of various flowers. He did not take off his coat and work with spade and hoe—did not experience the pleasure of clearing away unsightly weeds, tying up drooping stems, or cutting off dead blossoms. He never rose early and saw the garden in its dawning beauty, when the roses were bathed in dew, and the cobwebs were

transformed into diamond traceries—no, he preferred staying in bed and reading the latest novel. In a word, he took no *trouble* about the garden, and therefore never got to *love* it. It was a pretty picture to him—nothing more: not a beautiful living joyous reality.

That a garden is as attractive in winter as in summer, no one would contend; but we *do* maintain that it has, at that season, certain peculiar charms. To begin with, the deciduous trees, being bare of leaves, show the structure of their branches down to the tiniest twig, and the beauty here displayed is remarkable, especially in the case of the delicate tracery of the birch. The trunks themselves also command our notice. These are extremely picturesque, whether ribbed and knotted, and coated here and there with feathery grey-green lichen, or hidden with luxuriant wreaths of glossy ivy. But the evergreen trees are our special admiration. In the summer, amid all the luxuriant vegetation, we hardly noticed them, but now they reign without a rival, and remind us that they are faithful friends, who wear the same face in winter as in summer. "O Tannenbaum, O Tannenbaum, wie treu sind deine Blätter!" There is the holly, with its dark glossy leaves and crimson fruit—a very king in dignity and strength; the noble Scotch fir, the spruce, the massive yew, and the cypress. Then there are the laurels—somewhat formal perhaps, but bright in appearance, and forming a compact screen to break the force of cold winds and hide bare patches of ground; the rhododendrons, showing clearly the promise of spring bloom; the arbutus, with its lovely red berries, and other shrubs and trees of infinite variety.

Then as to flowers.—We will not mention those that bloom in the green-house, for a green-house may be an appendage to a suburban villa, but, confining ourselves to outdoor flowers, we may say that there is hardly a period through the winter (except in the case of hard frost or deep snow) when these are entirely lacking. In mild seasons tea-roses bloom all through November, and we have often picked some good specimens (rather frozen perhaps) at Christmas. Then amongst purely winter flowers there are anemones—beautiful brilliant bits of colour, reminding one of the sunny Riviera—Czar violets, that a few sunny days will tempt into bloom, Christmas roses and winter cherries. By the end of January the snowdrop, the winter aconite, and the lovely Scilla sibirica make their appearance; primroses and forget-me-nots soon follow, and behold it is winter no longer!

"But," someone will say, "suppose there is a fall of snow!" "Be it so," we reply, "that is just what we delight in!" The flowers are hidden for the time, but the whole garden presents a scene of the greatest beauty. The trees—especially those that are not deciduous—are clad in robes of diamond-strewn ermine, the lawn is a spotless velvet carpet, the bare wires of the garden arches are converted into exquisite carved trellis-work. It is a lovely transformation scene, evoked by the potent wand of

the Ice King, who reserves his chief marvels for the eye of the countryman alone.

But the garden, to one who loves it, offers further pleasures in winter. There is first the satisfaction of putting everything in thorough order. Plots of ground that were perforce neglected in the summer can now be made neat, fruit-trees and roses can be staked, and rubbish cleared out of the way and burned. Then there are the delights of anticipation, for the gardener is before all things a man of faith. In winter he examines the buds on his peach and plum trees, and already sees his next season's crop. This bare patch of ground shall, he thinks, next spring be starred with narcissus; on that wall will gleam golden roses; along this border tall lilies will lift their snowy heads. Then, in frosty weather, there are trees to be felled and faggots to be tied, and on misty rainy days there is sawing and splitting of logs in the wood-shed. A capital exercise is this latter! It will make you warm on the coldest day, and as the wedge cleaves the sawn blocks into triangular segments, you think with satisfaction of the crackling fires they will make in your dining-room.

Do you not envy us this recreation, O Londoner? Have you any like resource during your dismal weeks of smoky fog, that is, exclusive of such things as theatre-going and concert-hearing, which are, after all, mere passive enjoyments?

Not many birds frequent the garden in winter, but those there are can be observed to great advantage. In cold weather we always throw them out crumbs from the window. This seems like feeding our enemies, for they are terribly unprincipled as regards the fruit in summer, but we do it all the same, and consider ourselves amply repaid by the pleasure of watching their beautiful plumage and graceful movements. Scores of sparrows, tits, chaffinches and robins come and feed unconcernedly under our very eyes. The robin is perhaps the favourite; there is a fearlessness, a saucy confidence about him that is truly fascinating. For the special benefit of the tits we saw coco-nuts in half and hang them up on the branches of trees, or on a nail close to our window-sill. The tits come and banquet on them in a manner that makes one tremble for their digestions.

Generally speaking, our winter birds are apparently confined to a few varieties; one wonders what becomes of the others—that is, of those that do not migrate.

> "Ilk happing bird, wee helpless thing,
> That in the merry months of spring
> Delighted me to hear thee sing,
> What comes o' thee?"

In very severe weather unwonted visitors, such as rooks, come to the garden in quest of food, and one winter, when there was deep snow, a flock of fieldfares suddenly made their appearance, and remained with us till they had stripped every

berry from the hollies, when they as suddenly flew away again. Poor things, they were evidently half-starved; let us hope they found sufficient berries elsewhere to last them till the snow, the birds' great enemy, was melted!

A. L. STEVENSON.

THE WHITE CATTLE OF CADZOW.

NEAR to Hamilton, the centre of the Lanarkshire coal-mining industry and the principal seat of Scotland's premier Duke, is situated Cadzow Forest, one of the ducal parks. Of considerable extent, this forest—or at least a large part of it—represents all that has come down to us of the vast Caledonian Forest, which, more than a thousand years ago, extended from sea to sea over a large part of the south of Scotland. Here may still be seen old oaks—squat, misshapen, and of great girth—one of the largest with a bole of 30 feet high, having a circumference of 26 feet 7 inches at a yard from the ground. Some, indeed, are hollow, and in one of these eight persons can stand at a time. But though the trees still bear leaf and fruit, they are rapidly decaying, and in a generation or so, like that great wood to which they refer us, they will be but a memory.

In carving its way through the forest, the river Avon has cut out a great gorge of from two hundred to three hundred feet deep, with its sides in some places densely wooded; in other steeper parts festooned with ivy, honeysuckle, and kindred climbers. Of this gorge, John Burroughs, the American essayist, summing up his impressions of British scenery in that charming little book of his, *Fresh Fields*, has written: "It was the wildest bit of forest scenery I saw anywhere. I almost imagined myself on the head-waters of the Hudson or the Penobscot."

The ruins of the ancient baronial residence of the Hamilton family crown a precipitous rock on the left-hand side of the stream. A royal residence in the times of Alexander II. and Alexander III., it was given by Robert the Bruce, shortly after Bannockburn, to Walter FitzGilbert, the founder of the Hamilton family. Thither ill-fated Mary fled after her escape from the lonely water-girt tower of Lochleven, and here she assembled that army which was so disastrously routed at Langside. To punish the Hamiltons for the part they played at that time, the castle was destroyed by order of the Regent, Murray.

But, perhaps, the object of most interest to the casual sight-seer will be the white wild cattle, which still roam, as their ancestors did of yore, amid the great oaks.

As to their origin, naturalists hold different opinions. By some they are regarded as directly descended from the native

wild ox, *Bos scoticus;* by others—with perhaps greater probability—as sprung from the ordinary domestic stock gone wild.

The Cadzow cattle have turned-up, black-tipped horns; are well-proportioned; in colour, a creamy white with black markings—the muzzles, the eyes, the ears, the hoofs, and the forelegs, up nearly to the knee, being black. This uniformity in the markings is owing to the fact that all calves not properly marked are separated from the herd and killed.

It is somewhat difficult to approach near enough the herd to examine the animals closely, for on the approach of man they trot off in a body to what they consider a safe distance; if the intruder press them too hard, wheeling round and forming into a line, they charge down upon him in a body, but halt when about twenty yards distant and again retreat. The object of this hostile demonstration had, however, better take his departure without delay, or the cattle will make a grand final charge, from which escape will be well-nigh impossible. Sir Walter Scott's description of the cattle, in his fine ballad *Cadzow Castle*, is well worth quoting:—

"Through the huge oaks of Evandale,
Whose limbs a thousand years have worn,
What sullen roar comes down the gale,
And drowns the hunter's pealing horn?

"Mightiest of all the beasts of chase,
That roam in woody Caledon,
Crashing the forest in his race,
The mountain bull comes thundering on.

"Fierce, on the hunter's quiver'd band,
He rolls his eyes of swarthy glow,
Spurns, with black hoof and horn, the sand,
And tosses high his mane of snow."

It is interesting, although disappointing, to note that Scott, notwithstanding his having spent the Christmas of 1801 at Hamilton Palace, never saw the wild cattle.

About 1760 the Hamilton herd had been extirpated on account of its ferocity, and not till 1809 do we hear of white cattle browsing in Cadzow Forest. Whence the park was restocked is somewhat of a mystery; but it has been surmised that it was from a portion of the Ardrossan herd belonging to the Earl of Eglinton, which about that time was dispersed, and which is believed to have descended from the former Cadzow one. About 1840 the Cadzow herd seems to have been polled; but now, without exception, it is horned.

In 1866 the herd narrowly escaped extinction through the outbreak of rinderpest. A few young animals were hidden in the deep gorge of the Avon, and from these survivors—eight in all, and only one bull—the present herd is descended.

In 1884, it having been deemed advisable that new blood should be infused into the herd, a bull was obtained from Kilmory. The calves born were, however, off the markings and

had to be destroyed. In 1886 the experiment of obtaining a bull from Chillingham proved more successful, and one or two of the calves born having either the Hamilton or the Chillingham markings were preserved. In 1886 the herd numbered threescore, but this year it is at a very low ebb, there being but eight bulls, thirteen cows, and four properly marked calves. Every year there is a battle royal amongst the bulls for the leadership of the herd. This is sometimes attended with most disastrous results; and in 1885 four bulls perished in this way, and two in 1886.

The Hamilton herd of wild white cattle is now the sole remaining Scottish one, those kept at Auchencruive, Cumbernauld, Drumlanrig, and Ardrossan, being long since extinct. On the dispersion of the latter herd about the beginning of this century a part, it is presumed, came to Hamilton, the remainder being sent to Blair Athole, in Perthshire. But at Blair Athole from one cause and another the cattle became reduced to one young pure-bred bull. This animal was sent to Sir John Orde, of Kilmory, Argyllshire, who with considerable difficulty procured a few white West Highland cattle or "kyloes," and from these and the Blair Athole bull the present Kilmory herd is derived. The last recorded locality for wild cattle in Scotland, other than those of the preserved herds, is Stirling, where they seem to have been hunted up to about 1578.

The most famous English herd is that kept at Chillingham Park, Northumberland, the seat of the Earl of Tankerville. Though somewhat fiercer in disposition than those at Cadzow, nevertheless, the Chillingham cattle are much less noble, picturesque, and awe-inspiring in appearance. They are inferior in size and symmetry, and though the coat may be finer, the markings are not nearly so beautiful. The horns are brown, passing into white at the tips, the ears and muzzle reddish. These markings do not contrast so well with the white coat as the black ones of the Hamilton herd.

Another famous English herd is that preserved at Lyme Park, Cheshire. It has the characteristic colour of all the wild herds, white with blackish markings. At Somerford Park, also in Cheshire, there is a domesticated herd which, however, preserves the peculiar features of wild white cattle. Hornless and pure white, the rims of the eyes, ears, muzzle and hoofs are black. The cows are exceptionally good milkers.

At Chartley, in Staffordshire, another herd is preserved in its pristine purity. Visitors to the Zoo will have an opportunity of examining a fine bull of this strain, presented to the Zoological Society by Lord Ferrers. The Chartley cattle are cream-white, with black muzzles and ears and black-tipped horns. In the neighbourhood of Chartley the singular superstition prevails that whenever a black calf is born to this herd a member of the Ferrers family dies. Accordingly such black calves as are occasionally born are immediately killed by the keepers.

The herds which were once preserved at Gisburne Park, Yorkshire, and Gunton Park, Norfolk, are now extinct; but the semi-domesticated herds of Blickling and Woodbastwick are offshoots from the latter.

In conclusion, let it be observed that fresh blood requires to be infused into all such herds from time to time, for constant in-breeding can have but one result—the total extinction at no very distant date of our largest and fiercest wild or semi-wild animal.

J. Bertram McCabe.

MY MOOR.

Purple with heather, and golden with gorse,
  Stretches the moorland for mile after mile;
Over it cloud-shadows float in their course—
  Grave thoughts passing athwart a smile,—
Till the shimmering distance, grey and gold,
Drowns all in a glory manifold.

O the blue butterflies quivering there,
  Hovering, flickering, never at rest,—
Quickened flecks of the upper air
  Brought down by seeing the earth so blest;
And the grasshoppers shrilling their quaint delight
At having been born in a world so bright!

Overhead circles the lapwing slow,
  Waving his black-tipped curves of wings,
Calling so clearly, that I, as I go,
  Call back an answering "peewit" that brings
The sweep of his circles so low as he flies
That I see his green plume, and the doubt in his eyes.

Harebell and crowfoot and bracken and ling
  Gladden my heart as it beats all aglow
In a brotherhood true with each living thing,
  From the crimson-tipped bee, and the chaffer slow,
And the small lithe lizard with jewelled eye,
To the lark that has lost herself far in the sky.

Ay me, where am I? For here I sit,
  With bricks all round me, bilious and brown,
And not a chance this summer to quit
  The bustle and roar and the cries of town,
Nor to cease to breathe this over-breathed air,
Heavy with toil, and laden with care.

Well,—face it and chase it, this vain regret :
Which would I choose,—to see my moor
With eyes such as many that I have met,
Which see and are blind, which all wealth leaves poor,
Or to sit, brick-prisoned, but free within,
Freeborn by a charter no gold can win ?

E. HUBBARD.

A REMARKABLE HOUSE-MARTIN'S NEST.

AS I was passing the station at Snainton, in north-east Yorkshire (on the branch line of the N.E.R., between Pickering and Scarborough), the station-master called my attention to a martin's nest, which was of such unusual construction that I think an account of it may be of interest to readers of NATURE NOTES.

On the platform in front of the station buildings is a glass-roofed verandah, and on the under side of this the nest was placed.

The common position of the martin's nest is well known—a mud structure cemented together in some remarkable manner by one of the trade secrets of bird architecture, and placed on the under side of the eaves of a building, or the corner-stone of a window, with the wall of the building for one of the walls of the nest.

The bird-architect of Snainton, evidently of an original turn of mind, determined to build its nest without the usual assistance of a vertical wall, and successfully carried out its design, the nest of mud being suspended from the glass roof of the verandah, like an inverted "skep" of an old-fashioned beehive, with the usual small entrance-hole at the top of the mud just under the glass of the verandah.

It would be interesting to know whether any bird-observing readers have ever noticed a similar case of a martin's nest being so suspended, without the usual vertical wall assistance at one side. I should imagine it must be an exceedingly rare occurrence, for as far as my observation goes the house-martin in building invariably commences at the bottom of the nest, and works upwards to the top; and the construction of a pendent nest as above described must, under ordinary circumstances, involve the reversal of the usual principles of bird architecture.

The birds in this case, however, were not absolutely without artificial assistance, although it was of a very meagre character. Under the verandah, at a space of about three inches below the glass, is a horizontal bell-wire, and on this slender foundation the birds commenced their building operations; the task proved no easy one, for as soon as a good solid lump of mud was accumu-

lated on the wire, as may be imagined, it began to overbalance, and swing round on to the under side. The station-master, noticing the impending calamity, and desirous of encouraging the ingenuity of the birds, suspended a long piece of string parallel with the wire, and so prevented their tottering structure from falling on to the platform below. With this slight assistance the birds soon piled up the mud until it reached the glass, and having once firmly cemented the wall of their prospective habitation on one side to the roof, further progress was rapid, and in four or five days the walls of the hanging house were completed, and after the usual details of internal fittings were arranged eggs were laid, and a young brood successfully reared.

The nest was only some eight or nine feet from the station platform, and in full view of a platform seat only a few feet away; but in spite of the constant presence of railway passengers and platform officials, the birds continued steadily at their structural operations, affording much interest to the station-master and his staff.

It may be added that few stations in England can compare with that at Snainton, in Yorkshire, for the beauty of its appearance, due to the tasteful way in which the station garden has been arranged and the station buildings ornamented. This house-martin was evidently a bird of æsthetic as well as inventive mind, and it was a graceful compliment which it paid the station-master, in selecting his station for its novel and successful experiment in nidification.

PHILIP BURTT.

THE BOOKSHELF.

ALTHOUGH we have done our best to keep pace with the increasing amount of literature which finds its way to our shelves, we have still a number of books which have not received notice. In some cases this has been delayed because we wished to give a fairly long review of the book, with the result that nothing has been said about it. But now, at the end of the year, and at a time when the present occupant of the editorial chair is leaving that post, it seems desirable to clear up arrears, and, even though late, to recommend such books as deserve recommendation to the notice of our readers.

Among these Mr. Ellacombe's *Plant-lore and Garden-craft of Shakespeare* (Edwin Arnold, 10s. 6d.) holds a high place. Mr. Ellacombe has all the qualifications necessary for writing a work of this kind—he is a gardener, an archæologist, a botanist, and a *littérateur;* and his book shows evidence of each of these factors. The subject is not new to him, for two editions have preceded this; but it is not too much to say that, in its elegant presentment as well as in the charming illustrations, both of plants and places, with which it is adorned, this is practically a new book. It is at once readable and learned—a too rare combination; and whether regarded as a book for the naturalist, the student, or the drawing-room, will be found adequate to any requirements made upon it.

We cannot say as much for Mr. H. W. Seager's *Natural History in Shakespeare's Time* (Elliot Stock), a clumsy-looking book of extracts from contemporary

writers, with some illustrations (not well produced) from that delightfully quaint collection, the *Ortus Sanitatis*. Mr. Seager has hit upon an excellent idea, and has brought together more than sufficient material to have made an amusing and instructive book, but he has not succeeded in doing so. The subjects are arranged alphabetically, which, although convenient for reference is fatal to anything like a connected idea of any one of them. We go from animal to plant and from plant to mineral, and the result of such miscellaneous reading is confusing. Some of the extracts are without interest, and in others we think more reticence might have been observed. Mr. Seager's notes are useful, but not interesting, nor are they always accurate—*e.g.*, "mallow" is not synonymous with "hollyhock" (p. 194). But a great deal of interesting matter not otherwise easily accessible has been brought together, and those interested in the folk-lore of natural history will find it a useful addition to their library.

A somewhat similar volume, but differing in its mode of treatment, is *Gleanings from the Natural History of the Ancients*, by the Rev. M. G. Watkins (Stock). Many of the ideas current in Shakespeare's time date (as indeed Mr. Seager points out) from a remote antiquity, and Mr. Watkins correlates these under more suitable headings. Dogs, cats, owls, elephants, horses, wolves, with roses, gardens, fish-lore, and the like, form the subjects of his various chapters, and are treated with a happy combination of learning and popular style. The plentiful use of footnotes is a commendable feature, as by their means the reader wishing to prosecute further researches is enabled to go to the source whence Mr. Watkins has derived his information. This is an interesting and elegant volume, and should find a place on the Selbornian bookshelf.

When we suggested (p. 175) that Mrs. Fuller Maitland would do well to bring together in one volume the charming verses with which she had embellished the two books noticed in these pages, we were unaware that our suggestion had been anticipated. In *The Song-book of Bethia Hardacre* (Chapman & Hall, 6s.) we find not only our old friends, two of which we quoted on the page already referred to, but a large number of new verses, all of which are charming, and many extremely beautiful. These verses are extracted from a series of (alas!) imaginary works in the author's possession, written by members of her family, beginning with "The Honeycomb of Homage" by Sir Florio Hardacre, in 1597, and extending to Bethia's work in the present century. This is one of the books from which we had hoped to quote at length, but we must restrict ourselves to one poem, referring our readers with confidence to the volume itself for the rest. Beautiful type adds to the charm of the work; but is not the present fashion of rough edges being carried too far? In London houses these jutting margins not only attract the dust, but permanently retain it.

"*To Willows.*

"To all the Willows in the land
Now greetings do I send,
Bidding them know that I do stand
Ever their faithful friend;
And honoured hold the time of year
When catkins on their boughs appear.

"'Withy is weak' the proverb tells
'But many woods he binds';
And in the truth that therein dwells
My heart some comfort finds,
Hoping that weakness also can
Not only things ignoble span."

Lady Lindsay is certainly entitled to our apology for not having sooner noticed *The Flower-Seller, and Other Poems* (Longmans). Her verses are, as our readers know, full of graceful fancy and sweet expression, while their tone is always sympathetic and tender. Better than words of our own will the following lines appeal to Selbornians:—

Of a Bird-cage.
One of those made in Germany by convicts sentenced to penal servitude.

"A tiny prison, built by prisoned hands
To coop some bright-winged thing; a mimic cell,
Wrought amid sighs by one who knew full well
The smart and pressure of enforced bands,
When high-souled courage failed him to assuage
The close-laid torture of a life-locked cage.

"Perchance he wept his own deep grief and pain,
Alas, each day the sun rose high to set
In clouds of golden hope! And yet, and yet,
Time mattered naught. Him freedom called in vain
As in the future she might beckon it—
That bird now free—who captive here should sit.

"Thus with vague sympathy was each space barr'd
Yet none less sure. Here shall the creature eat,
Here drink, here restless perch in cold or heat,
Setting to melody the sentence hard
Fate spells the words of. Plane the cramping floor,
Bend down the latch, and firmly bolt the door."

Miss Alicia Donne sends us her *Peeps into Bird Life* (Simpkin and Marshall), to which Dr. Walsham How, the late Bishop of Wakefield, contributes a preface in verse—the last rhymes, we believe, which came from his pen. This gives us an opportunity of expressing our regret that, through the carelessness of the Post Office authorities, our readers were deprived of a charming sketch of this true Selbornian, which Mr. William Whitewell had written for these pages. Miss Donne's verses are simple and pretty—didactic, perhaps, rather than poetical, but eminently suitable for children on account of the lessons they convey in a tuneful and pleasant way. The country printer has worked his wild will in the matter of "embellishments."

A contribution to our poetical literature of general and permanent value is supplied in the long looked for Second Series of the *Golden Treasury of Poems and Lyrics* (Macmillan, 2s. 6d. net), which may be regarded as Mr. F. T. Palgrave's legacy to the literary world. Although more open to criticism than the First Series—which has become a household word and a popular possession—on account of its omissions and inclusions, it is no unworthy companion to its predecessor, and, like it, is a book to put in the pocket for use during the odd spare minutes which occur sometimes in the busiest life. Nor only then; on a country walk, or a railway journey, or when tired out at night before going to bed, a dip into its pages cannot fail to soothe and refresh.

Mr. Palgrave's penultimate work—*Landscape Poetry* (Macmillan, 6s.)—has been on our shelves for some months, awaiting a longer notice than we are now able to bestow on it. Viewed only as a collection of extracts, it is a charming volume, showing, as might be expected, a vast range of reading and a great power of selection. But it is much more than this; the author's appreciation of his subject, from Greek, Latin, and Hebrew poetry, through early Italian, Celtic, Anglo-Saxon verse, and on through the mediæval period and the rise of romanticism, down to the men of our own day—Browning, Arnold, Burns and Tennyson, to the last of whom a chapter is devoted—is admirably conveyed, and forms delightful reading. This is a book which may be read with equal enjoyment in the field or by the fireside; it cannot fail to enable the reader to appreciate more fully the charms of landscape, especially that of his own land.

Another book which has stood over for some time is *The Poetry of Sport* (10s. 6d.), edited and selected by Hedley Peek; this forms the concluding volume of Messrs. Longmans' "Badminton Library," several instalments of which have been noticed in these pages. It is an interesting volume, largely on account of its capital illustrations, ancient and modern, and shows much painstaking research; but we confess that we are inclined to demur to the editor's

affirmative reply to his opening question "Is sport a fitting subject for poetry?" and to point to this large and representative selection in support of our view.

In the West Country (Simpkin & Marshall) is the latest collection of essays by Mr. Francis A. Knight, whose previous volumes have received a welcome in these pages. The contents of this as of the earlier volumes are mainly reprints from the *Daily News* and the *Spectator*, to both of which papers Mr. Knight is a valued contributor. This time, as the title implies, we are definitely confined to one portion of England—and an attractive portion it is, comprising as it does Clovelly and Exmoor, Winscombe and the Mendips. "The Country Life" is one of the most suggestive of these essays, and one of the most Selbornian in spirit, although some may be scandalized at the author's qualified defence of birds'-nesting—of course in moderation: "Not every nest-robber, it is true, is a lover of nature, but the birds'-nester who is a naturalist born soon wakens not only to the beauty, but to the significance of his fragile treasures." That those who have most opportunities of becoming acquainted with nature are often the most ignorant of her charms is only too true, and Mr. Knight lays due stress on the fact, suggesting that in time the County Councils may do something for the rustic enlightenment, by means of lectures and the limelight. At present, as we demonstrated in our last issue, the local bodies in most places—for correspondents have told us that the state of things we endeavoured to depict is general all over the country—are employing their energies mainly in destroying the material for observation. There are many books of this kind, but so long as they are written by those who, like Mr. Knight, know what they are talking about and are able to express themselves in literary language, they are not likely to want readers, or to fail in attractiveness. The volume is appropriately illustrated.

Sir Herbert Maxwell's *Post Meridiana: Afternoon Essays* (Blackwood, 6s.) deals with matters other than those dear to Selbornians, but they also include much of interest to nature-lovers. "Woodlands, with a postscript on London Trees" and "Gardens" deal excellently with their respective subjects; and "Trouting Tattle" and "Salmon-flies" show that blending of the sportsman and the naturalist of which Charles Kingsley was a prominent type. An index makes the book additionally easy of consultation.

In *The Woodland Life*, by Edward Thomas (Blackwood, 6s.) we have another volume of reprinted essays, and a pretty volume it is, with its clear type and red-lined pages. Perhaps the material is somewhat slender for a six-shilling book, but there is pleasant chat about a good many subjects, and ample evidence of careful observation. Mr. Thomas distributes his attentions more equally between birds and plants than do some writers of this class, and his notes are from nearer home than Mr. Knight's—many from Richmond Park and other places near London. A year's diary "in English fields and woods" shows much of the careful observation to which we have referred, but we are not quite sure that it was worth printing in full, although it contains some interesting notes.

In NATURE NOTES for 1893 (pp. 69-71) we printed an admirable paper by Mr. Ernest Ingersoll, entitled "Sport without a Gun," which we quoted from another paper wherein it was said to be extracted from an American book styled *Our Animal Friends*. We were never fortunate enough to see a copy of this work, but now Messrs. Macmillan send us a book by the same author, called *Wild Neighbours* (6s.), which confirms us in our view that in Mr. Ernest Ingersoll we have an important accession to the ranks of popular writers on Natural History. This is a more serious volume than those of which we have just been speaking, in that it is devoted to special studies of some particular groups of animals or kinds of phenomena, but it is full of interest, and especially acceptable as treating of transatlantic creatures, thus taking us somewhat out of the groove in which we are accustomed to run. "Gray Squirrels," "The Skunk, calmly considered," "The Badger and his Kin," "The Hound of the Plains" (the coyote, or prairie wolf), "A Natural New Englander" (the woodchuck), and "As Little Brother of the Bear" ("Brer Coon," to quote the name by which he is known to readers of *Uncle Remus*) are some of the titles of Mr. Ingersoll's chapters; there are others on "The Service of Tails" and "Animal Training and Animal Intelligence," somewhat more general in treatment, but equally full

of interest. The volume is very well illustrated, and will make an admirable Christmas-box for the youngster who is already familiar with most home-made books on natural history.

But if we are to speak of Christmas-boxes, we must not fail to note that that admirable picture-book, *All About Animals* (Newnes), which we noticed at some length in our September issue, is now complete, furnishing a collection of authentic animal portraits such as has never before been brought together. We must refer our readers to what we have already said for further particulars about the book; its value and interest have been kept up to the end. The twelve numbers, including 240 pictures, each occupying a page, cost, without discount, 6s., the cover for binding them half-a-crown; so that, for less than half a sovereign, every nursery can possess a delightful and instructive collection of pictures of animals. We trust few will fail to be supplied with it.

Messrs. Newnes have also issued in twelve sevenpenny parts, *The Thames Illustrated*, an admirably and profusely illustrated guide to the upper portion of our river—that between Richmond and Oxford. Mr. John Leyland, who is responsible for the work, has shown much skill in the selection of the many charming landscapes and buildings herein portrayed.

Messrs. Cassell, having completed the cheap popular re-issue, in sixpenny weekly parts, of their *Familiar Wild Flowers*, are now proceeding to give us their companion work, *Familiar Garden Flowers*, at an equally cheap rate. The plan of the two books is, as is well known, similar; the plates in each are by Mr. F. E. Hulme, the letterpress to the *Garden Flowers* being by Mr. Shirley Hibberd. The volumes formed by these two series will be a delight to many a schoolroom, and a treasured possession of many a young naturalist. We are inclined to envy Messrs. Cassell the power of doing good which they exercise by the issue of cheap and excellent publications like these.

A somewhat more serious and systematic, yet popular and interesting, book about wild flowers is Mr. R. Lloyd Praeger's *Open-Air Studies in Botany* (Griffin, 7s. 6d.). It is no easy task to write an original book on British plants, but Mr. Praeger has succeeded in accomplishing it. He takes us to localities of various kinds—meadow, cornfield, river, sea, mountain and bay—and makes us sit down by him while he examines and tells us all about the wild flowers which he has gathered in each place. This may not seem an absolutely new scheme, but those who peruse Mr. Praeger's book—and we hope many of our readers will be among them—will find that he has treated it in a new manner, by bringing in to his descriptions the results of recent researches into the movements, fertilization, colour, and distribution of plants. None but one well acquainted with plants in the field could have written this book, and by no means every one possessed of such knowledge could have set forward in simple yet accurate language the phenomena with which Mr. Praeger deals. We must not omit to call attention to the charming illustrations, especially those reproduced from photographs of groups of growing plants. We understand that this is Mr. Praeger's first attempt at popular writing; we hope we shall have other works from his pen, equally accurate and attractive in every way. The only fault we have to find with our copy of the book rests with the publishers, who have disfigured the title page with a hideous red stamp.

One of the best and cheapest books we have seen for a long time is Prof. Bertram Windle's *Life in Early Britain* (Nutt, 3s. 6d.), "being an account of the early inhabitants of this island and the memorials which they have left behind them." Here once more we have a man of scientific eminence—for Prof. Windle is Dean of the Medical Faculty and Professor of Anatomy at Mason College, Birmingham—providing out of the stores of his knowledge a book at once popular and accurate, compiled from the best authorities, with many original observations—the whole expressed in a clear and interesting manner. While thoroughly "up to date," to use a convenient if not elegant expression, Prof. Windle does not indulge in the speculations dear to romance writers of the Clodd and Grant Allen type, although he is careful to state clearly and fully the solid conclusions at which

science has arrived. A number of useful illustrations, with plans and maps, and an excellent index, complete the attractiveness and usefulness of the book.

The Story of a Red Deer, by the Hon. J. W. Fortescue (Macmillan, 4s. 6d.), was written, as the author tells us in a delightfully quaint dedication, at the request of a "kinsman" of nine years old. It is one of the class of animal stories which, unless children's tastes have entirely changed during the last forty years, are always acceptable to young readers; but—and this may be the result of a critical age—it has far more pretensions to literary style than could be claimed for our own early favourites—"Bob, the Spotted Terrier," "Captain," "The Robins," and the like. The simple, graphic, child-like (which is by no means the same as child*ish*) style is most attractive, and Mr. Fortescue's book will find a welcome in many a home this Christmas. The following extract from the preface will commend itself to Selbornians:—

"Though I would have you love the stories of great men and take delight in the reading of good books, yet I would have you take no less delight in the birds and the beasts that share with you your home, and in the observance of their goings out and their comings in, of their friends and of their enemies, of their prosperities and of their perils; whereby you will gain not only that which the great Mr. Milton (in his Tract on Education) hath called the helpful experiences of hunters, fowlers, and fishermen, but such a love of God's creatures as will make the world the fuller of joy for you because the fuller of friends; and this not in one wise only, for I have ever noticed that they who be fondest of dumb creatures are given to be tenderest to their fellow-men."

AMERICAN INSECTS.*

THE old exclusiveness of British entomologists has been breaking down for many years, and it would probably be difficult to find many entomologists now who were totally unacquainted with any other insects than those of Britain; but the publication of a popular book on the insects of the United States, in London as well as in America, is a somewhat new departure, and is therefore to be welcomed as extending the popular information respecting insects to those of another continent. It is also an advantage that a book of this nature deals with the fauna of the Northern United States, for although this is a limited Temperate fauna, and the subtropical forms are not very numerous, yet their representatives are spread over the whole country, as common and conspicuous insects, side by side with the Temperate fauna; whereas in Europe really subtropical forms are almost exclusively Mediterranean, and therefore somewhat beyond the observation of the entomologists of Northern or Central Europe.

Thus, in the present volume, side by side with insects comparable with well-known British forms, such as tiger-beetles, crickets, lady-birds, &c., we find such conspicuous and unfamiliar forms as the giant water-bugs (Belostomæ), the stick insects, the Cecropia, Emperor Moth, and the Monarch Butterfly, the last of which, indeed, is struggling to obtain a footing as a colonist in England, though whether it will succeed is as yet uncertain. The illustrations, as a rule, are fairly good, though one or two are poor, and others have come out badly in printing from perhaps worn blocks.

Insects are so much more numerous and destructive in North America than in England that the importance of the study of economic entomology and the appointment of regular professors of entomology is fully recognized there, and America is far before any European country in this respect. What has hitherto been done towards the public recognition of agricultural entomology in England is almost nothing, just as we should seek in vain in England (the Imperial Insti-

* *Life Histories of American Insects.* By Clarence Morris Weed, D.Sc. With 21 full page plates, and many figures in the text. Macmillan, New York and London: 1897. 8vo, pp. xii., 272. Price 6s.

tute notwithstanding) for anything like a representative collection of the insects of our own colonies, to which we are always adding, but of the natural productions of which we are, in many cases, deplorably ignorant.

W. F. K.

SELBORNIANA.

Protection of Birds.—The International Congress on the Protection of Birds, inaugurated at Aix-en-Provence on November 9, under the auspices of the Ligue Ornithophile Française, of whom M. Louis-Adrien Levat is the able President, has lately been concluded. The protection of insectivorous birds useful to agriculture was the chief matter treated of, and it was decided to forward to the Governments of Europe, through the French Minister for Foreign Affairs, the resolutions which were formulated. Public educational bodies are also to be memorialized in order to obtain, if possible, the serious consideration of this important subject by schoolmasters and Government School Inspectors. Numerous French and Italian agricultural, horticultural and sporting societies were represented at the Congress, and delegates from the Selborne Society and the Society for the Protection of Birds were also present.

NATURAL HISTORY NOTES AND QUERIES.

Wren feigning Death.—I know some birds will simulate death when in danger, but I was not until very lately aware that the little wren ever did. Hearing a sort of rustle in some newspapers under one of the dining-room windows and at the same time a scream of "There is a rat in the room, there is a rat in that paper," I went to investigate. The screamer of course ran away. I found in the paper a little wren, and thought my cat "Dr. Jim," had been transgressing. On taking up the bird it felt quite warm, and I could not see a trace of injury. It lay quite still and I thought I could feel its heart beating. Anyhow I decided to keep it until next morning, so I laid it in an empty mouse cage, one of the cages with glass fronts, where people keep white mice. It had been left here by one of my grandchildren whose pet had died. I took cage and occupant, a to all appearance dead bird, to my bedroom, and early next day heard a fluttering noise in the cage; the wren was moving about. As soon as the maid came in, I got her to open the window and put the cage on a table close by, where I could see it, and to pull up the glass slide. The wren by that time was flat on its side at the bottom of its cage, a dead bird once more; but in a minute or two when all was still, it flew out and on to a pot of ferns standing on the window sill, when with a sort of note of joy, it saw the open window and was out in a second.

Helen E. Watney.

A "Solitary Wasp"?—During last June I have been much interested, whilst sitting daily on my balcony, to watch the movements of an insect much resembling a wasp, but thinner in body, and with somewhat longer wings. When I first noticed it it seemed to be much disturbed about something, but, on my moving my seat, it made a dart against the wall against which I was sitting and hurriedly entered a small hole, about the size of a pea, in the brickwork. After remaining a few seconds it came out of the hole backwards and flew away, but it returned again several times during the day, at different intervals, and invariably went through the same performance. The presence of several persons on the seat did not appear to concern it in the least. Yesterday morning, to my surprise, I found the hole covered up, and fancying that one of my grandchildren had done this, I removed the dirt, but soon afterwards the insect made its appearance again and seemed unusually busy about something. I fancied it was removing a portion of the dirt which I had left at the entrance of the hole, but

on looking at the hole again, after the lapse of about an hour, I found it had been most carefully covered over again, and so beautifully done that it required a close examination to discover where the hole in the brick actually existed. There are several small holes in the brickwork, but this insect invariably went into the same one, and it was never accompanied by a companion. I am interested in knowing the name of this insect and its habits. Can you enlighten me?

Richmond. E. H.

[Mr. Kirby says: "Probably one of the so-called solitary wasps, or land wasps, but it would not be safe to attempt to give it a name without seeing the insect itself."—Ed., *N.N.*]

An Obliging Hedgehog.—A remarkable incident occurred here about the end of October. Dr. Lyndon had arranged to give a lecture on hedgehogs; but though diligent search and inquiries had been made for some time beforehand for the purpose of securing a live specimen for the better illustration of the lecture, no hedgehog had been good enough to come forward. On the evening of the lecture, as Mr. Lowry was walking along the road on his way to the lecture-room, he heard in the darkness a sudden rustling in the dead leaves, and on ascertaining the cause he found a hedgehog, who immediately rolled herself into a ball—in accordance with the habit of the animal—and so proved an easy prey to Mr. Lowry, who at once wrapped her in his handkerchief. After having done this, he heard another rustling in the leaves on the other side of the hedge, and there found quite a baby hedgehog, which also was captured. The surprise of the lecturer and those assembled in the room can scarcely be described when Mr. Lowry, who arrived late, placed his recent captures on the table. The hedgehog and her offspring, who so obligingly presented themselves for the purposes of the lecture at the eleventh hour, somewhat touchingly illustrated the old adage, "Better late than never."

Grayshott. F. C.

Foxes and Badgers.—Is there any reliable information as to what age foxes attain in their natural wild life? For instance, some have been known in a locality for hunting by some distinctive markings, colour, or even "bob-tailed" ones. I have a tame fox 6½ years old. To day it broke through wire netting from confinement, caught a fowl almost instantly, and would have killed and eaten it had I not picked the fox up and put it back again. This is natural habit or instinct, as it was picked up when about as large as an ordinary rat. I have been much interested during the past spring and summer watching the movements of a family of seven badgers in a coppice. From appearances their burrows must have existed for centuries, either for badgers or foxes.

J. Hiam.

Stock-doves (p. 236).—I should like to correct the note respecting the date. At the time I wrote "to-day" it would probably be on or about July 8 or 9. Although these birds have been known to breed in my wild bird boxes until November, they had no young after October this year. It appears from a letter dated Nov. 30, 1780, that Gilbert White did not know where they built. Their natural homes are in hollow trees, especially pollard willows, and they build nests similar to the wood-pigeons, in the open, with small sticks and the like. One nest a few years ago was lined with dry holly leaves, which must have been anything but comfortable for the young unfledged birds, or even, one would think, for the breast of the old one.

J. Hiam.

Frogs (p. 239).—Dr. M. C. Cooke in his book on the British reptiles gives instances of the climbing powers of frogs and toads, and on the authority of a Mr. Reeks says that toads are often found in the nests of small birds in hedges. Probably the frog whose habits are very like those of the toad has a similar *penchant.*

Fyfield, Abingdon. W. H. Warner.

A Curious Ash.—Those of your readers who were interested in Mrs. Brightwen's chapter on "Adaptation" in *Glimpses into Plant Life*, and the account and drawing of the little Scotch fir, defunct, which you reproduce on p. 230, may like to know of a little ash tree, now growing in a still more curious

position. It grew from a seed, which must have blown on to a ledge of an old-fashioned farmhouse many years ago, for one of the inhabitants of this charming old farmhouse remembers the little tree fifty-four years ago, and always the same size it is now, about twenty-one inches high. At present it is bare, but it has leaves every year, and flowers and seeds. There used to be another larger one at the other end of the same ledge, but one year when the farmhouse was being whitewashed, a ladder was placed against it and knocked it down. The nourishment of the still living little ash tree must come entirely from the air and moisture, imbibed by leaves and bark, as the mortar must be very old and dry, considering the date on the farmhouse, though I believe the owners call this "the new bit."

Dunrowan, West Kirby. M. SYBILLA DALGLISH.

Horses and Sunday.—My friend who for years has had a number of horses, tells me this. On any morning of the week, at five or six o'clock, the men going into the stables always find the horses on their feet, ready to be harnessed. On Sunday morning they would be late, entering the stable at seven or even eight o'clock the horses would be still resting at ease. One Sunday, when my friend went for his gig-horse, the others looked round as if to ask, "Whatever is the meaning of this?"

Hexham. I. E. PAGE.

A Carnivorous Mollusc (p. 239).—The Testacellæ are hardly so rare as your correspondent supposes. We have three British species, all of which are widely distributed over England. They are, however, seldom seen above ground, as their food is chiefly earthworms, which they kill and eat in their burrows. They will also devour other slugs and snails.

Highgate. J. E. COOPER.

Cuckoo singing at Night (p. 234).—Mr. Dove mentions cuckoos singing at night in Tasmania. When living near Oxford in 1894, we frequently heard the cuckoos at night. There were four who kept calling and answering one another from different trees in one field. From 11 p.m. to 1 a.m. they kept singing continuously. We also heard them in 1896, and thought it might portend an equally hot summer as in 1894.

Foxton. A. M. GREENWOOD.

TO CORRESPONDENTS.

M. A. P.—(1) *Pistillaria quinquelaris* Fr. (2) We do not find. (3) *Agaricus geotropus* Bull. (4) *Stereum hirsutum* Fr. (5) *Polystictus versicolor* Fr.

A. S. H.—The indications afforded are insufficient for identification.

RULES FOR CONTRIBUTORS AND CORRESPONDENTS.

Contributors are requested to note the address of the Editor, as Mr. Britten will not be responsible for any communications which may be forwarded to him.

1. All communications for NATURE NOTES must be authenticated with name and address, not necessarily for publication.

2. The return of unaccepted contributions cannot be guaranteed. We cannot undertake to name specimens privately, or to return them.

3. Communications for any number must be in the Editor's hands by the 10th of the preceding month.

4. Communications for NATURE NOTES should be addressed to the Editor of NATURE NOTES, 16, Vernon Terrace, Brighton, as should specimens for naming, books for review, &c. The Editor cannot undertake to reply privately to questions.

5. Letters connected with the Selborne Society, as well as all inquiries as to the supply of NATURE NOTES, and subscriptions, should be addressed to the Secretary of the Selborne Society, A. J. WESTERN, Esq., 20, Hanover Square, W.

6. The Editor is not responsible for the contents of the last page of each number; communications respecting that page must be addressed to Mr. WESTERN, as above.

SELBORNE SOCIETY NOTICES.

Donations towards Reduction of the Deficit.—The following donations are hereby acknowledged with thanks:—Earl of Stamford, £3; Miss H. C. Manson, 20s.; R. J. Pead, Esq., 20s.; Miss A. M. Casterton-Smelt, 10s.; W. H. Hills, Esq., 5s.; and P. Devonshire Jones, Esq., 2s. 6d.

Donation to Leaflet Fund.—The Committee acknowledges with thanks the following donation:—Rev. H. E. Luxmore, 10s.

Churchyard Bottom Wood Committee.—Archibald Clarke, Esq., has been elected a member of the above Committee, as the representative of the Selborne Society.

A Plea for the British Butterfly.—This leaflet has now been reprinted, and copies can be had on application to the Secretary. Price 1s. per 100, post free.

Arrears of Subscriptions.—Members who have not yet paid their subscriptions for 1897 are requested to kindly do so at once. By so doing it will greatly facilitate the preparation of the Balance Sheet for the year.

Council and Committee Meetings.—The next meeting of the Council will be held on December 7 at 5.30, and of the Magazine and Leaflet Committee on December 21 at 5.30.

Leaflets.—"The Cruelty of Wearing Ospreys," by Mrs. Lichfield; "Feathered Women," a letter by W. H. Hudson, which appeared in the *Times* of October 17, 1893, and was reprinted in NATURE NOTES of November, 1893; "The New Wild Birds' Protection Act," by H. D. Rawnsley; "How to Start a Branch of the Selborne Society," by E. A. Martin; "A Plea for the British Butterfly," by W. F. Kirby.

"A Bibliography of Gilbert White, the Natural Historian and Antiquarian of Selborne," can now be had on application to the Hon. Secretary. Published under the auspices of the Society. The Roxburghe Press, 1897, 8vo, pp. xiii., 274. Price 3s. 6d.

Branch Payment.—Richmond (for magazines), £10. Bedhampton (ditto), £1.

NEWS FROM THE BRANCHES.

Bath.—On November 22, a Conversazione took place at the Museum, Royal Literary Institution, when an illuminated address was presented to the President, H. D. Skrine, Esq., the presentation being made by W. J. Brackenridge, Esq. Some of the rambles taken during the season were described, with accompanying lime-light illustrations, by E. J. Appleby, Esq., and an interesting exhibition of slides was shown by the Ladies' Microscopical Society.

Clapton (Lower Lea Valley) Branch.—At a Committee Meeting held on September 29, the Hon. Sec. tendered his resignation, but as no member was at the moment willing to undertake the duties, he has consented to remain in office until the close of the present year. The Winter Social Meetings commenced on Saturday, November 6, with "A Microscopical and Social Evening."

Croydon and Norwood.—The Winter Session commenced on November 16, when F. W. Ashley, F.Z.S., gave one of his delightful bird lectures at West Croydon Hall. Mr. Ashley's contributions to NATURE NOTES on the subject of birds and their habits are well known, and a most enthusiastic audience listened to his lecture on this occasion, his subject being "The Utility of Birds." A series of slides were kindly lent by the Birds' Protection Society. Acknowledgments are due to Mr. W. H. Coldwells for lending and operating the lime-light lantern.

EDWARD A. MARTIN, F.G.S.,
Hon. Sec. Magazine and Leaflet Committee.

VALEDICTORY.

WITH this number the present Editor terminates his connection with NATURE NOTES, with which he has been associated—save for a few months—during the eight years of its existence, and of which he has been for six years the sole responsible Editor.

It is unnecessary to enter into the circumstances which have induced him to take this step; but he cannot lay down his pen without a few words of thanks to those who have so generously supported him with their contributions, their counsel, and their encouragement during the whole of this period. That he has satisfied every one he is not foolish enough to suppose; that he has pleased many he has every reason for knowing; and the occasional criticisms he has received, complaining now of his want of sympathy, now of his sentimentalism, have been the best evidence that on the whole he has held the balance evenly between two dangerous extremes.

The Editor has especially to thank those who, from their position, are entitled to speak with authority on matters pertaining to their own studies, and who have done much to render the notices of books of the special value which they have been recognized as possessing. The reviews may not always have been complimentary, but they have invariably been honest and competent; and this in these days is not always the case. Nor must he forget to acknowledge the help he has received from his colleagues in the Natural History Museum, nor the encouragement which NATURE NOTES has always met with from the press.

The work entailed by the monthly issue has been considerable, especially to one already much occupied; but to counterbalance this the Editor has the satisfaction of knowing that he has done something to encourage and develop that intelligent study and appreciation of Nature which has made the little village of Selborne a household word wherever English is read.

And so, farewell!

No. 85. Vol. VIII. January, 1897.

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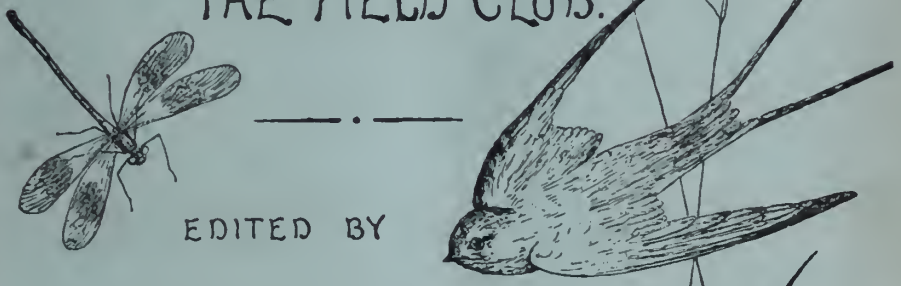

EDITED BY

JAMES BRITTEN, F.L.S

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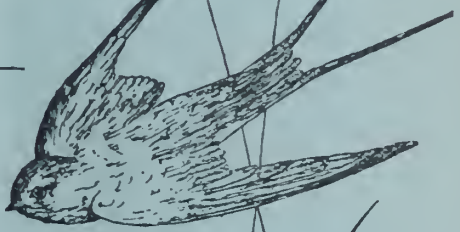

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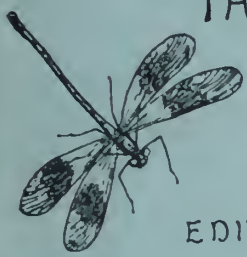

EDITED BY

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EDITED BY

JAMES BRITTEN, F.L.S

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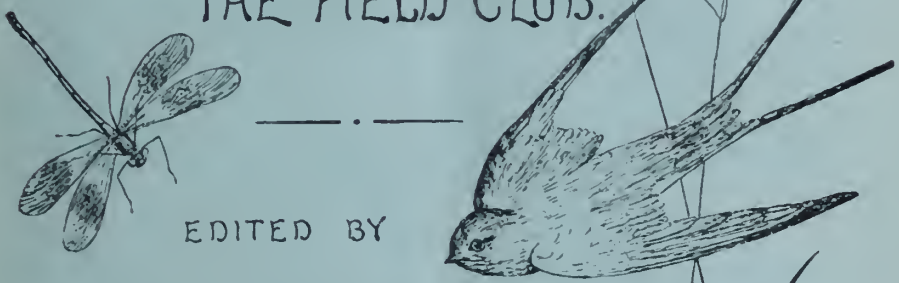

EDITED BY

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